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ENVIRONMENTAL ASSESSMENT STATEMENT (EAS)
AND
SUPPLEMENTAL STUDIES TO THE EAS

Lead Agency:
Department of City Planning
120 Broadway, 31St Floor
New York, NY 10271

Prepared for:
Queens Realty Holdings of NY, Ltd.

Prepared by:
Equity Environmental Engineering
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November 2, 2022

25-46 Far Rockaway Boulevard Rezoning
Far Rockaway, NY
Block 15785, Lots 55, 4, p/o 7, and p/o 54; and Block 15737, Lot 1 and 10
Queens Community District 14

CEQR Reference No: 20DCP053Q

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EAS SHORT FORM

City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) SHORT FORM

FOR UNLISTED ACTIONS ONLY • *Please fill out and submit to the appropriate agency* (see instructions)

Part I: GENERAL INFORMATION

1. *Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)?* ☐ YES ☒ NO

If "yes," **STOP** and **complete the FULL EAS FORM**.

2. *Project Name* 25-46 Far Rockway Boulevard Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
20DCP053Q	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
200232ZMQ, 220330ZRQ	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY New York City Department of City Planning			NAME OF APPLICANT Queens Realty Holdings of NY, Ltd.		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, AICP, Director Environmental Assessment Review Division - DCP			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Amber Kartalyan, Equity Environmental Engineering LLC		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 500 International Drive, Suite 150 Mount Olive NJ 07828		
CITY New York	STATE NY	ZIP 10271	CITY Mount Olive	STATE NJ	ZIP 07828
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5. *Project Description*

Queens Realty Holdings of NY, Ltd. (the 'Applicant') is seeking a discretionary action in order to facilitate the redevelopment of a site within the Far Rockaway section of Queens Community District 14. The proposed action is a Zoning Map Amendment to establish an R6B district within an area currently zoned R4-1 consisting of Block 15785, Lot 55, 4 and p/o Lots 7 and 54 and Block 15737, Lots 1 and 10 (the 'Affected Area'), and a Zoning Text Amendment to map the Affected Area for Mandatory Inclusionary Housing Options 1 and 2. The Affected Area consists of two blockfronts on the eastern side of Hartman Lane from Ocean Crest Boulevard in the north to Far Rockaway Boulevard in the south, to a depth of 115 feet on Block 15737, between Ocean Crest Boulevard and Beach Channel Drive, and to a depth of 80 feet between Beach Channel Drive and Far Rockaway Boulevard. In its entirety, the Affected Area comprises approximately 42,540 SF of lot area. The Applicant proposes to develop Block 15785, Lots 4 and 55 ('Projected Development Site 1') with a 5-story, 50-foot plus cellar residential building, containing approximately 32,500 zoning square feet (ZSF) with 40 dwelling units, of which 10 are proposed to be permanently affordable under MIH Option 1. Additionally, 20 enclosed parking spaces would be provided at cellar level.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 14	STREET ADDRESS 25-46 Far Rockaway Boulevard
TAX BLOCK(S) AND LOT(S) Affected Block 15785, Lots 55, 4, p/o 7 and 54 and Block 15737 Lots 1 and 10.		ZIP CODE 11691

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Projected Development Site is a corner parcel with frontage on Hartman Lane, Far Rockaway Boulevard and Beach Channel Drive, these streets are the bounding streets for the Projected Development Site as well. The Affected Area is bounded by Ocean Crest Boulevard to the north, Hartman Lane to the west, and Far Rockaway Boulevard to the south.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R4-1	ZONING SECTIONAL MAP NUMBER 31a

6. *Required Actions or Approvals* (check all that apply)

***City Planning Commission*:** ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT ☐ ZONING CERTIFICATION ☐ CONCESSION
☒ ZONING MAP AMENDMENT ☐ ZONING AUTHORIZATION ☐ UDAAP
☒ ZONING TEXT AMENDMENT ☐ ACQUISITION—REAL PROPERTY ☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY ☐ DISPOSITION—REAL PROPERTY ☐ FRANCHISE
☐ HOUSING PLAN & PROJECT ☐ OTHER, explain:
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Board of Standards and Appeals*:** ☐ YES ☒ NO

☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION ☐ FUNDING OF CONSTRUCTION, specify:
☐ RULEMAKING ☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES ☐ FUNDING OF PROGRAMS, specify:
☐ 384(b)(4) APPROVAL ☐ PERMITS, specify:
☐ OTHER, explain:

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
☐ OTHER, explain:

***State or Federal Actions/Approvals/Funding*:** ☐ YES ☒ NO If "yes," specify:

7. *Site Description:* *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

***Graphics*:** *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 42,540 sf of lot area
Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.): 42,540
Other, describe (sq. ft.):

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 41,107
(increment of 28,444)
NUMBER OF BUILDINGS: 1 building
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 41,107
HEIGHT OF EACH BUILDING (ft.): The proposed building would have a maximum height of 50'-0".
NUMBER OF STORIES OF EACH BUILDING: 5 stories

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 15,044

The total square feet not owned or controlled by the applicant: 27,496

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 15,044 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 300,000 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 15,044 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	41,107 (UG2)			
Type (*e.g.,* retail, office, school)	multi-family units			

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 145 NUMBER OF ADDITIONAL WORKERS: increment (158 total)

Provide a brief explanation of how these numbers were determined: Using an average of 3.3 people per DU in Queens Census Tract 1 per 2015-2019 American Community Survey

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.

Has a No-Action scenario been defined for this project that differs from the existing condition? ☒ YES ☐ NO

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly: The No-Action scenario involves the demolition of the existing vacant multi-family structure on Lot 55 and redevelopment with an 8,330 GSF (7,713 ZSF; .75 FAR) 2-family structure. Lot 4, which is currently vacant, would be developed with a 4,333 GSF (4,166 ZSF; .75 FAR) 2-family structure. 2 parking spaces would be provided for each building for a total of 4 parking spaces.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2024

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: The Proposed Development Site is occupied with a vacant structure that is slated for demolition. The Proposed Actions would allow for a new multi-family residential structure. Factoring the Environmental Approval process and ULURP process of 18 months and an 18-month construction schedule for the Projected Development Site, a projected build year of 2024 is assumed.

10. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the "no" box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the "yes" box.
- For each "yes" response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Short EAS Form. For example, if a question is answered "no," an agency may request a short explanation for this response.

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form. See Section 2.1		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒

	YES	NO
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See Section 2.3		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☒	☐
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions. See Appendix D		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☐	☒
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☐	☒
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: A potential UST REC was identified, which is discussed in the Phase I in Appendix E.	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it	☐	☒

	YES	NO
involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?		
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 1,968 pounds per week		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): (126.7 x 28,444) = 3603854.8 MBTus		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See Section 2.7	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☐	☒
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to	☐	☒

	YES	NO
noise that preclude the potential for significant adverse impacts?		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☐	☒
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒

(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.

All construction activities would be completed within 18 months in a single-phase and would be performed subject to relevant NYC Department of Transportation ("DOT") and Department of Buildings ("DOB") regulations to ensure minimal construction related impacts.

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	DATE
Amber Kartalyan, Equity Environmental Engineering	November 2nd, 2022

SIGNATURE *Amber Kartalyan*

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potentially Significant Adverse Impact YES	NO
Land Use, Zoning, and Public Policy	☐	☒
Socioeconomic Conditions	☐	☒
Community Facilities and Services	☐	☒
Open Space	☐	☒
Shadows	☐	☒
Historic and Cultural Resources	☐	☒
Urban Design/Visual Resources	☐	☒
Natural Resources	☐	☒
Hazardous Materials	☐	☒
Water and Sewer Infrastructure	☐	☒
Solid Waste and Sanitation Services	☐	☒
Energy	☐	☒
Transportation	☐	☒
Air Quality	☐	☒
Greenhouse Gas Emissions	☐	☒
Noise	☐	☒
Public Health	☐	☒
Neighborhood Character	☐	☒
Construction	☐	☒

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ ☒

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

3. Check determination to be issued by the lead agency:

☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

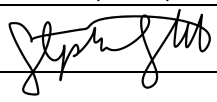
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

☒ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe, AICP, Director	November 4, 2022

SIGNATURE



NEGATIVE DECLARATION

Statement of No Significant Effect

Pursuant to Executive Order 91 of 1977, as amended, and the Rules of Procedure for City Environmental Quality Review, found at Title 62, Chapter 5 of the Rules of the City of New York and 6 NYCRR, Part 617, State Environmental Quality Review, the Department of City Planning acting on behalf of the City Planning Commission assumed the role of lead agency for the environmental review of the proposed actions. Based on a review of information about the project contained in this environmental assessment statement (EAS) and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed actions would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would not have a significant adverse impact on the environment. Reasons supporting this determination are noted below.

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The Applicant, Queens Realty Holdings of NY, Ltd., seeks a Zoning Map Amendment from an R4-1 district to an R6B district within the Affected Area (Block 15785, Lots 4, 55, and portions of 7 and 54; and Block 15737, Lot 1 and 10), and a Zoning Text Amendment to establish a Mandatory Inclusionary Housing (MIH) area, Options 1 and 2, coterminous with the Affected Area within the Far Rockaway section of Queens Community District 14. The Affected Area consists of two blockfronts on the eastern side of Hartman Lane from Ocean Crest Boulevard in the north to Far Rockaway Boulevard in the south, to a depth of 115 feet on Block 15737, between Ocean Crest Boulevard and Beach Channel Drive, and to a depth of 80 feet between Beach Channel Drive and Far Rockaway Boulevard. In its entirety, the Affected Area comprises approximately 42,540 square feet (sf) of lot area. The proposed actions would facilitate the development of a 5-story, 50 foot tall plus cellar residential building on the Projected Development Site (Block 15785, Lots 4 and 55). The Projected Development Site would contain approximately 33,096 zoning square feet (ZSF) with 40 dwelling units (including 10 affordable units under MIH option 1, or 25%) on a combined 15,044 sf lot. Additionally, 20 enclosed parking spaces would be provided at cellar level (13,469 gross square foot (GSF)) parking garage. The EAS analyzed a Reasonable Worst Case Development Scenario, that maximized the development potential of 41,107 GSF (32,973 ZSF, 2.19 FAR, containing 48 DUs). The Proposed Actions are anticipated to result in a change in land use and zoning, however, given the existing character of the rezoning area, the change in land use and zoning is not anticipated to result in a significant adverse impact. The Development Site is located within the Coastal Zone Boundary, and the Proposed Actions would be consistent with the policies set forth in the New York City Waterfront Revitalization Program (WRP#21-016).

Urban Design and Visual Resources

A detailed analysis related to Urban Design and Visual Resources is included in this EAS. The Projected Development Site is Applicant owned and located at 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive. Collectively, the two properties comprise the 15,044 lot. 25-46 Far Rockaway Boulevard has a 2,228 GSF vacant three-story residential structure that was constructed in 1931; the building has an aluminum siding façade, a large front porch facing Far Rockaway Boulevard and a large front yard, and is on a wooded corner lot. 25-47 Beach Channel Drive is a vacant parcel. Historically, this property had a single-family home, but it suffered total damage during a fire and as a result, the property had been cleared. Under the With-Action scenario, the Projected Development Site would be developed pursuant to R6B zoning with a 5-story building at a height of 50 feet. While the proposed action would result in an urban design change from the No-Action condition, the height and bulk of the Projected Development would be in character with the surrounding buildings based on comparison and contextual consideration of the surrounding area. Thus, the Proposed Actions would have no adverse or detrimental impacts on urban design and the pedestrian realm.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-676) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Louise Cafiero at lcafiero@planning.nyc.gov.

TITLE Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE November 4, 2022
SIGNATURE	
TITLE Chair, City Planning Commission	
NAME Daniel R. Garodnick	DATE November 7, 2022
SIGNATURE	

Project Name: 25-46 Far Rockaway Blvd Rezoning
CEQR # 20DCP053Q
SEQRA Classification: Unlisted

Determination of Significance Appendix

The Proposed Action(s) were determined to have the potential to result in changes to development on the following site(s):

Development Site	Borough	Block and Lot
Projected Development Site 1	Queens	Block 15785, Lots 4 and 55

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-676**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1	X	X	X

Hazardous Materials

The (E) designation requirements applicable to the **Projected Development Site 1** for hazardous materials would apply as follows:

Task 1-Sampling Protocol

The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

Project Name: 25-46 Far Rockaway Blvd Rezoning
CEQR # 20DCP053Q
SEQRA Classification: Unlisted

Air Quality

The (E) designation requirements for air quality would apply as follows:

> ***Projected Development Site 1 (Queens, Block 15785, Lots 4 and 55):*** *Any new residential or commercial development on the above-referenced property must ensure that the heating, ventilation, and air conditioning (HVAC) systems and/or the hot water equipment stack(s) is located at the building's highest level and at least 50 feet above grade to avoid any potential significant adverse air quality impacts.*

Noise

The (E) designation requirements for noise would apply as follows:

> ***Projected Development Site 1 (Queens, Block 15785, Lots 4 and 55):*** *To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on the facades facing Beach Channel Drive and the facades facing Hartman Lane within 50 feet of Beach Channel Drive and the facades facing Beach 25th Street within 50 feet of Beach Channel Drive to maintain an interior noise level not greater than 45 dBA for residential uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

Figure 1-1: Project Location Map - Aerial



Figure 1-2: Project Location Map



Figure 1-3: Zoning Map

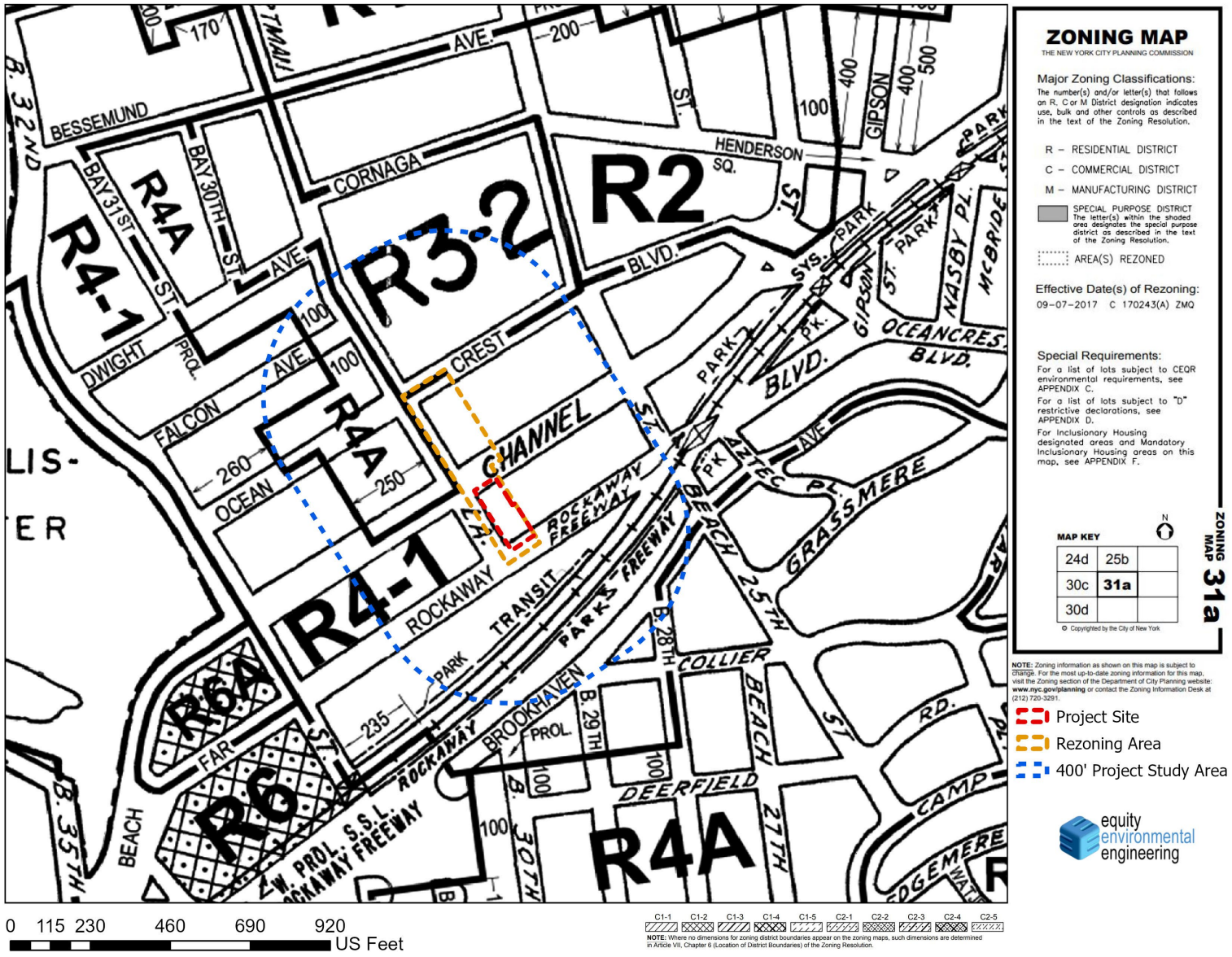
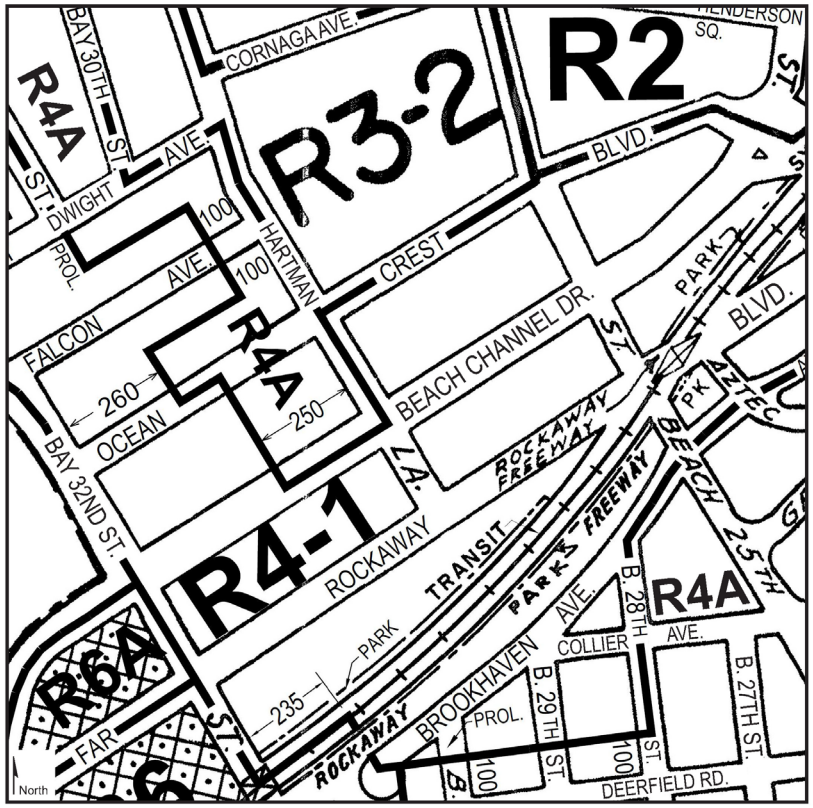
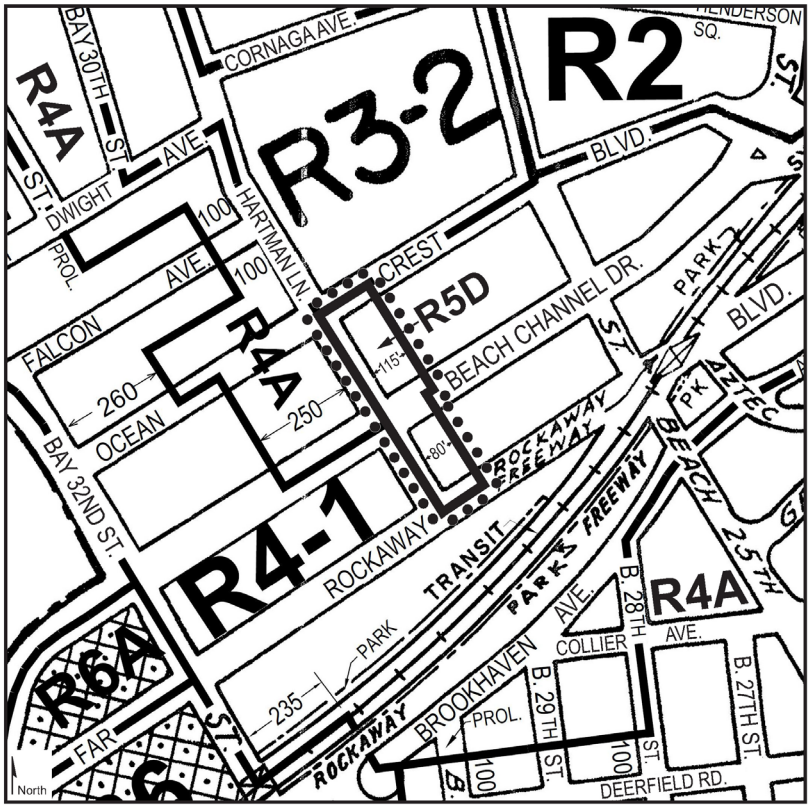


Figure 1-4: Zoning Change Map



Current Zoning Map (31a)



Proposed Zoning Map (31a) - Area being rezoned is outlined with dotted lines

Rezoning from R4-1 to R5D

C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

Figure 1-5: Tax Map

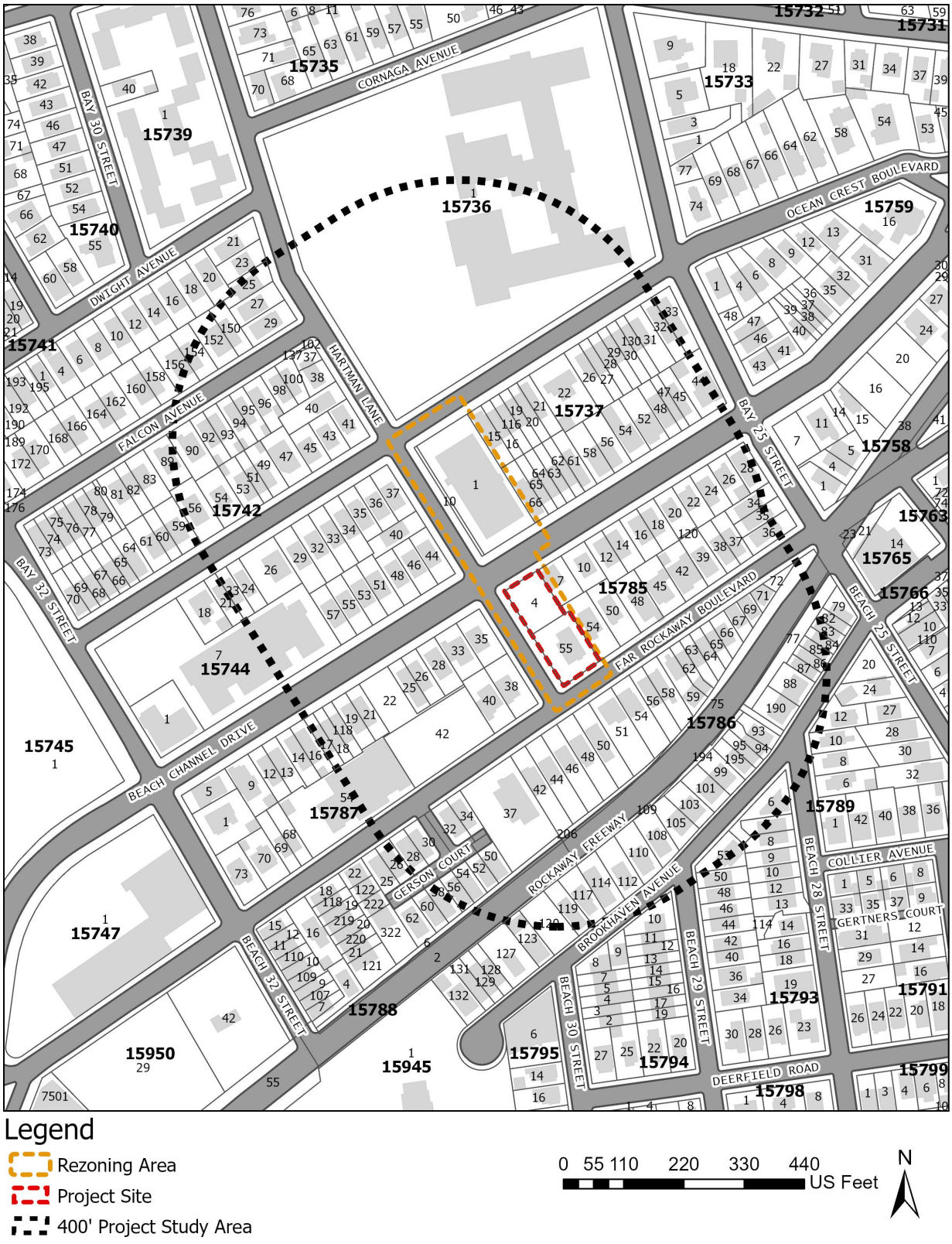


Figure 1-6: Land Use Map

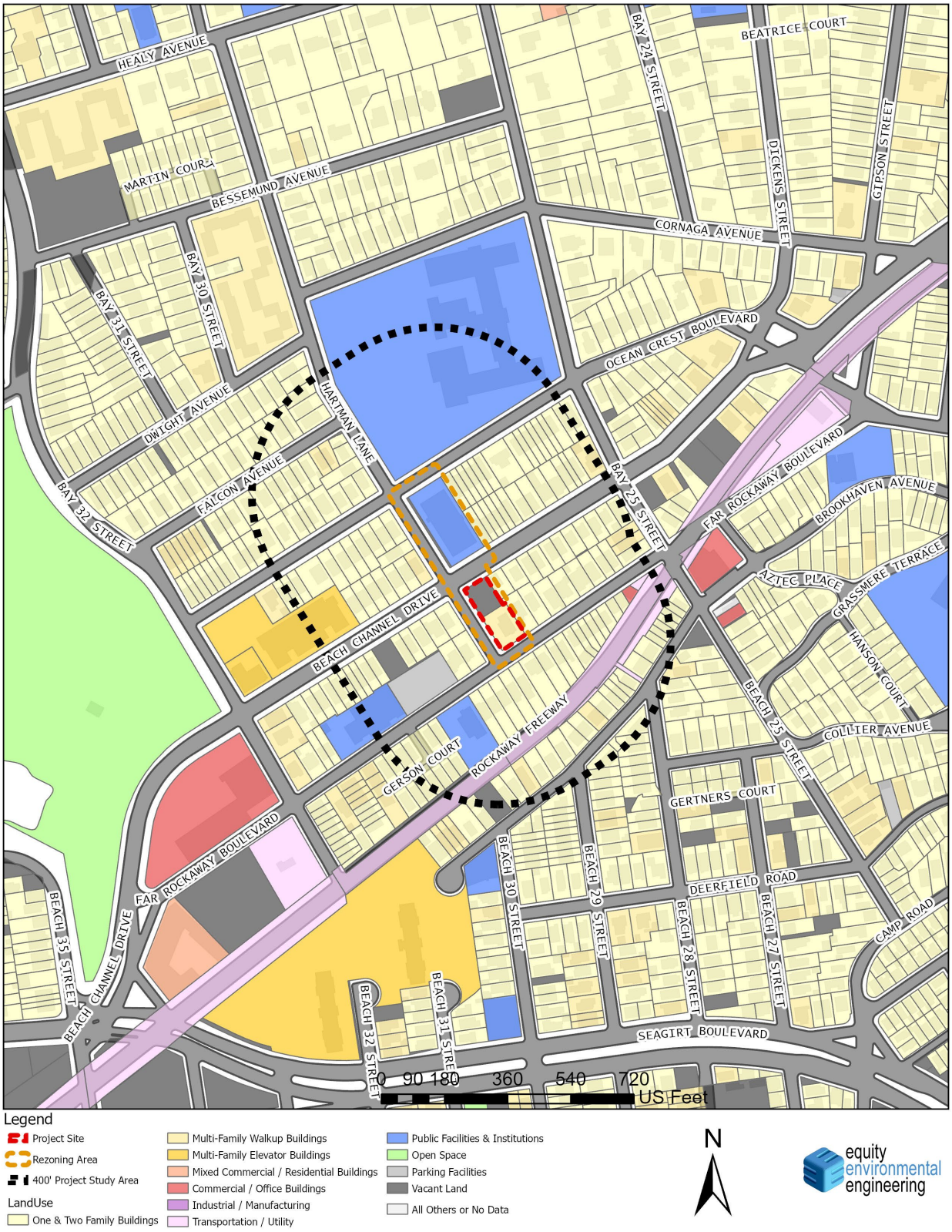


Figure 1-7: Site Photos 1-3 (Photos Taken February 2021)

Far Rockaway Blvd. Rezoning Photos #1-3

01 VIEW OF SUBJECT PROPERTY FACING NORTH EAST ON THE CORNER OF HARTMAN LANE AND FAR ROCKAWAY BOULEVARD. THE ADRESS OF THE BUILDING IS 25-46 FAR ROCKAWAY BOULEVARD.



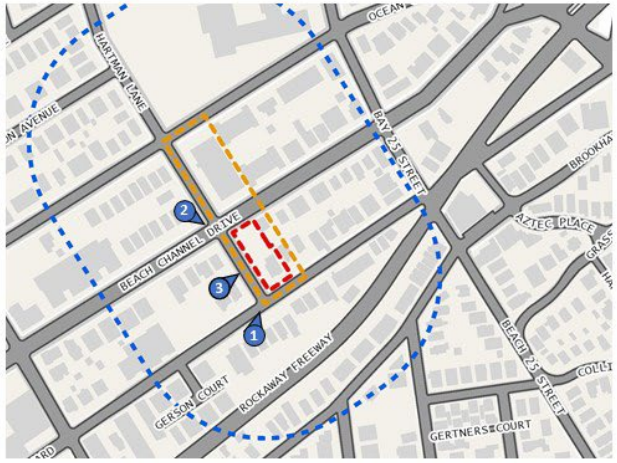
02 VIEW OF THE SUBJECT PROPERTY FROM THE CORNER OF HARTMAN AVE AND BEACH CHANNEL DRIVE. THE ADDRESS OF THE VACANT LOT IS 25-47 BEACH CHANNEL DRIVE.



01 VIEW OF SUBJECT PROPERTY FACING EAST ON HARTMAN LANE, MID-BLOCK BETWEEN BEACH CHANNEL DRIVE AND FAR ROCKAWAY BLVD. BOTH DEVELOPMENT SITES ARE CAPTURED IN THIS PHOTO.



Photo Key



1.0 PROJECT DESCRIPTION

1.1 Introduction

Queens Realty Holdings of NY, Ltd. (the 'Applicant') is seeking a discretionary action in order to facilitate the redevelopment of a site within the Far Rockaway section of Queens Community District 14. The Proposed Actions include a Zoning Map Amendment to establish an R6B district within an area currently zoned R4-1 consisting of Block 15785, Lot 55, 4 and p/o Lots 7 and 54 and Block 15737, Lot 1 and Lot 10 (the 'Affected Area'), and a Zoning Map Amendment to map the Affected Area for Mandatory Inclusionary Housing Options 1 and 2. The Affected Area consists of two blockfronts on the eastern side of Hartman Lane from Ocean Crest Boulevard in the north to Far Rockaway Boulevard in the south, to a depth of 115 feet on Block 15737, between Ocean Crest Boulevard and Beach Channel Drive, and to a depth of 80 feet between Beach Channel Drive and Far Rockaway Boulevard. In its entirety, the Affected Area comprises approximately 42,540 SF of lot area.

The Applicant proposes to develop Block 15785, Lots 4 and 55 ('Projected Development Site 1') with a 5-story, 50 foot tall plus cellar residential building, containing approximately 32,500 zoning square feet (ZSF) (2.16 FAR) with 40 dwelling units on a combined 15,044 sf lot. Additionally, 20 enclosed parking spaces would be provided at cellar level within a 13,469 gross square foot (GSF) parking garage. The Proposed Development would provide 10 affordable housing units under MIH option 1 or 25% of the 40 units would be set aside as permanently affordable for those with incomes averaging no greater than 60% of Area Median Income (AMI).

While the above states the applicant's intended development under the Proposed Actions, for conservative analysis purposes, a Reasonable Worst-Case Development Scenario (RWCDS) that maximizes development potential within the Affected Area under the Proposed Actions, as described below, is considered for purposes of identifying potential environmental impacts.

1.2 Actions Necessary to Facilitate the Project

The two actions ("The Proposed Actions") necessary to facilitate the project are a Zoning Map Amendment and a Zoning Text Amendment.

1. A Zoning Map Amendment to rezone the portion of Block 15737 within 115 feet of Hartman Lane and the portion of Block 15785 within 80 feet of Hartman Lane from an R4-1 zoning district to an R6B district.
2. A Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 14, Queens, to establish the Affected Area as an MIH Area.

Figure 1-4 shows the existing and proposed zoning for the Affected Area. The above-referenced action is subject to approval by the CPC pursuant to the Uniform Land Use Review Procedure (ULURP).

The "Project Area" or "Affected Area" consists of Block 15785, Lot 55, 4 and p/o Lots 7 and 54 and Block 15737, Lot 1 and Lot 10.

1.3 Background

The Affected Area was originally zoned R4 in 1961. It was then rezoned to an R4-1 contextual zoning district in 2008 as part of the Rockaway Neighborhoods Rezoning, a 280-block area rezoning of the Rockaway Peninsula intended to reinforce and protect the special character of the five Rockaway neighborhoods. The rezoning changed the existing R3, R3-2, R4, R5, and R6 zoning districts to contextual zoning districts.

The area to the north and south of the Affected Area was rezoned in 2006 as part of the Bayswater Rezoning. The rezoning affected approximately 82 blocks in the Bayswater and Far Rockaway neighborhoods of Community District 14. It rezoned the existing lower density zoning districts (R3-2, R4, and R5 zoning districts) to contextual and lower density zoning districts (R3A, R3X, R4A, and R4-1 zoning districts). This rezoning limited housing type, density, and building size of new residential development to reflect and preserve the established neighborhood development patterns. The objectives of the rezoning were to limit widespread lot subdivision, and to prevent development that was inconsistent with the character of the Bayswater and Far Rockaway communities.

1.4 Description of Surrounding Area

The Surrounding Area (within 400-foot radius of the Affected Area) is within the Far Rockaway neighborhood of Queens Community District 14. The area is characterized predominantly by one- and two-family detached and semi-detached residences and institutional uses. Also included in the housing stock are multifamily residential buildings ranging from three to six stories. The northeastern corner of Beach Channel Drive and Bay 32nd Street consists of two multifamily buildings, one 5 stories tall and the other 6 stories tall. The Challenge Preparatory Charter School is located within the Affected Area, and the Far Rockaway High School and Queens High School for Information, Research, and Technology are immediately to the north of the Affected Area. To the southwest of the Affected Area is the Bezalel Nursing Home and Rehabilitation Center, and to the east are several local retail grocers, liquor stores, and takeout restaurants are located along Far Rockaway Boulevard.

There are several schools in the surrounding area including the Department of Education site located north of Ocean Crest Boulevard at 8-21 Bay 25th Street. The site consists of four different schools ranging from 6th grade to 12th grade including Knowledge and Power Preparatory Academy IV, Academy of Medical Technology, Fredrick Douglass Academy IV High

School, and Queens High School for Information, Research, and Technology. Additionally, Wave Preparatory Elementary School and Grassmere Playground are located to the east. Further to the west of the Affected Area is Wave Crest Park with outdoor recreational facilities.

The Surrounding Area is well served by mass transit. The Beach 25th Street/Wavecrest Station for the elevated A train is located one block southeast of the Affected Area at the intersection of Far Rockaway Boulevard and Beach 25th Street. The Q22 provides east/west bus service along Seagirt Boulevard and Beach Channel Drive, with service beginning at Beach 169th Street/Rockaway Point Boulevard and ending at Beach 20th Street/Mott Avenue, with connections to other parts of Queens not located on the peninsula.

1.5 Description of Affected Area

The Affected Area is located in the Far Rockaway neighborhood of Queens Community District 14 and consists of six tax lots: Block 15785, Lots 55, 4, p/o 7, and p/o 54; and Block 15737, Lots 1 and 10. The Affected Area is on the east side of Hartman Lane bounded by Ocean Crest Boulevard to the north and Far Rockaway Boulevard to the south, and Beach 25th Street to the east.

<u>The Applicant Owned Projected Development Site</u>

Block 15785, Lots 55 and 4 are Applicant-owned and located at 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive, on the east side of Hartman Lane between Beach Channel Drive and Far Rockaway Boulevard. A vacant 3-story multifamily building is located on Lot 55, and Lot 4 is currently vacant after the single-family home on site was destroyed by a fire in 2009. Together the two properties comprise 15,044 square feet of lot area.

<u>Non-Applicant Sites</u>

Lots 7 and 54 are adjacent to the Projected Development Site, and the proposed rezoning would rezone a small portion of each lot. Both lots are improved with a two-family residential building. Across Beach Channel Drive to the north is the Challenge Prep Charter School, serving grades K-5, within Block 15737, Lot 1. The last lot within the Affected Area is Block 15737 Lot 10, which is a narrow (5 feet wide) strip of land immediately adjacent to the charter school abutting Hartman Lane.

Table 1.5-1: Non-Applicant Sites

Address	Block	Lot	Existing Use	Lot Size	Floor Area
25-43 Beach Channel Drive	15785	p/o 7	Two Family Residential Building	3,750 SF (approx. 300 SF within Affected Area	2,828 GSF
25-40 Far Rockaway Boulevard	15785	p/o 54	Two Family Residential Building	5,445 SF (approx. 210 SF within Affected Area)	2,277 GSF
25-40 Beach Channel Drive	15737	1	UG 3 K-5 Charter School (Challenge Prep)	25,813 SF	38,760 GSF
Ocean Crest Blvd (remnant sliver lot adjacent to 25-40 Beach Channel)	15737	10	Vacant Lot (only 5 ft in depth with 234.67 sf of frontage on Hartman Lane)	1,173 SF	N/A

1.6 Purpose and Need

The Applicant believes that the Projected Development Site is underutilized and presents an opportunity for new residential dwelling units in furtherance of city policy goals. The building occupying Block 15785, Lot 55 of the Projected Development Site is currently vacant and untenanted, and Lot 4 is vacant after the residence previously developed there was destroyed by a fire in 2009. The Applicant believes that the Proposed Actions would allow multi-family housing and additional dwelling units at a bulk and density that is compatible with the surrounding community. The Proposed Actions would allow multi-family housing and additional dwelling units in a Community District that has been steadily increasing in population.

The Project Area is underutilized and presents an opportunity for new residential dwelling units in furtherance of city policy goals.

The Projected Development would include 12 affordable housing units through the proposed MIH text amendment under Option 1, which would advance the City's affordable housing policy outlined in Housing New York 2.0 (2017) that seeks to create or preserve 300,000 units of affordable housing by 2026.

1.7 Analysis Framework

The analysis which follows compares the difference between the Proposed Actions (With-Action) and the development which could occur under the existing R4-1 zoning (No-Action). This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions occurring in a Study Area of approximately 400-feet around the Affected Area. This study radius may vary for different aspects on environmental review, depending on

the distance at which environmental impacts attributable to the Proposed Actions may be experienced. The analysis framework is described below.

Build Year

The Projected Development Site is occupied with a vacant structure that is slated for demolition. The Proposed Actions would allow for a new multi-family residential structure. Factoring the Environmental Approval process and ULURP process of 18 months and an 18-month construction schedule for the Projected Development Site, a projected build year of 2024 is assumed.

Reasonable Worst-Case Development Scenario

In order to assess the possible effects of the Proposed Actions, a Reasonable Worst-Case Development Scenario ("RWCDS") was developed for both the future without the Proposed Actions (Future No-Action) and the future with the Proposed Actions (Future With-Action) for the build year of 2024. The framework for analysis considers the difference between the future absent the Proposed Actions (the "Future No-Action Condition") and the future with the Proposed Actions ("the Future With-Action Condition") in the 2024 build year.

The development of the no-action scenario and with-action scenario follow the soft site criteria as established in Sections 2-6 and 2-7 of the *2021 CEQR Technical Manual*. Only one Projected Development Site was identified under these conditions—applicant-owned Block 15785, Lots 55 and 4.

Future Without the Proposed Actions

The No-Action scenario involves the demolition of the existing vacant multi-family structure on Lot 55 and redevelopment under the existing R4-1 zoning with an 8,330 GSF (7,713 ZSF; .75 FAR) 2-family structure. Lot 4, which is currently vacant, would be developed with a 4,333 GSF (4,166 ZSF; .75 FAR) 2-family structure. 2 parking spaces would be provided for each building for a total of 4 parking spaces.

No other changes are expected to occur in the absence of the Proposed Actions. Development on Lots 55 and 4 is anticipated, in part, because plans for the demolition of the existing structure on Lot 55 have already been filed with the DOB. Additionally, given the increasing population in the area (documented in 2010 Census and 2016 ACS data), rising 1- and 2-family home costs (review of property price trends in the area), and significant new residential construction nearby, the development of Lots 55 and 4 can be expected to occur in the future without the Proposed Actions.

Future With the Proposed Actions

Under the With-Action scenario the Projected Development Site, a combined 15,044 sf lot (Block 15785, Lots 55 and 4), would be developed pursuant to R6B zoning with a 5-story, 50-foot tall, 41,107 GSF (32,973 ZSF; 2.19 FAR) building. The building would contain 41,107 GSF of residential floor area with 48 dwelling units, of which 12 dwelling units or 25% are considered affordable pursuant to MIH for the purposes of a conservative analysis. Where required for a conservative assessment of environmental impact, e.g Community Facility analysis, an assumption of 30% affordable units or 14 units were evaluated. 20 parking spaces would be provided under the worst-case scenario evaluation.

The no-action, and with-action conditions on the Projected Development Site 1 lots within the Affected Area are presented in **Table 1.7-1: RWCDS Incremental Analysis Table.**

Table 1.7-1: RWCDS Incremental Analysis Table

Use	No-Action Condition	With-Action Condition	Increment
Commercial GSF	0	0	0
Residential GSF	12,663	41,107	+28,444
Total GSF	12,663	41,107	+28,444
Residential DUs	4	48	+44
Off-Street Parking	4	20	16
Residents[1]	13	158	+145
Workers[2]	0	0	0

2.0 ENVIRONMENTAL REVIEW

2.1 Land Use, Zoning, and Public Policy

The *2021 CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the surrounding area. Land use, zoning and public policy are described in detail below. This section considers existing conditions, development trends, and zoning and other public policies in relation to the Projected Development Site and the surrounding area as well as the larger area in which the Proposed Actions may have an effect. Because the Proposed Actions would permit development of a use (multiple family residential) that is not permitted as of right under the Projected Development Site's existing R4-1 zoning, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (ZoLa) database and PLUTOTM 20v1 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within the 400-foot Study Area were performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of New York City Department of City Planning (NYCDCP) and other city agencies programs and documentation.

2.1.1 Land Use

The *2021 CEQR Technical Manual* suggests that a Land use, Zoning and Public Policy Study Area should extend 400 feet from the site of the Proposed Actions. Existing land use patterns of city blocks within approximately 400 feet of the Affected Area are presented in **Figure 1-6** above. The proposed zoning map amendment would affect the following lots: Block 15785, Lots 55 and 4 (Development Site), and a portion of Lots 7 and 54, as well as Block 15737, Lots 1 and 10.

Existing Conditions

Existing land uses within the 400-foot surrounding area primarily consist of residential (1- and 2-family buildings and multi-family apartments) and community facility uses. The general built character of the Surrounding Area is mixed, with buildings ranging in height from 1- to 2.5-story 1- and 2-family buildings and 3- to 6-story multi-family buildings, and larger institutional buildings such as the Challenge Preparatory Charter School; Queens High School for Information, Research, and Technology; Far Rockaway High School; and the Bezalel Nursing Home and Rehabilitation Center.

Additionally, based on permits issued by the DOB for the surrounding area, there are nine major construction projects underway within 400 feet of the Affected Area—three along Ocean Crest Boulevard to the northwest, and five along Brookhaven Avenue and Beach 28th Street to the southeast. These nine active projects will each construct a new residential building (each 3 stories in height) that will include 2 dwelling units, for 18 additional dwelling units within the area.

Analysis

Future No-Action Scenario

The No-Action Scenario involves the demolition of the existing vacant multi-family structure on Lot 55 and redevelopment with an 8,330 GSF (7,713 ZSF; .75 FAR) 2-family structure. Lot 4, which is currently a vacant lot, would be developed with a 4,333 GSF (4,166 ZSF; .75 FAR) 2-family structure. Two parking spaces would be provided for each building for a total of four parking spaces.

No other changes are expected to occur in the absence of the Proposed Actions. Lots 55 and 4, which are projected to develop in the No-Action Scenario, are both owned by The Applicant, and plans for the demolition of the existing structure on Lot 55 have already been filed with the DOB.

Future With-Action Scenario

Under the With-Action scenario the Projected Development Site (Block 15785, Lots 55 and 4) would be developed pursuant to R6B zoning with a 5-story building at a height of 50 feet. The building would contain 41,107 GSF (32,973 ZSF; 2.19 FAR) of floor area with 48 dwelling units, of which 12 would be classified as affordable. 20 parking spaces would be provided at the cellar level.

All other lots in the Project Area would remain in their existing condition in the With-Action Scenario.

Conclusion

The Proposed Rezoning would allow a change in land use that would permit higher residential densities in a neighborhood characterized by a mix of multi-family residential apartments and one- and two-family houses. The surrounding area already contains a large and enduring residential population of three- to six-story apartment buildings and public institutions such as schools and religious facilities. The proposed rezoning would allow for the redevelopment of two vacant lots, one with an existing abandoned 3-story residential building built in 1931, with a new multi-family 5-story, 49-foot-tall residential building. This land use is similar to the surrounding area and would not result in a significant adverse environmental impact.

2.1.2 Zoning

Existing zoning districts within approximately 400 feet of the Affected Area are presented in **Figure 2.1-1.** The proposed zoning map amendment would affect the following lots: Block 15785, Lots 55, 4, p/o Lot 7, and p/o Lot 54; Block 15737, Lots 1 and 10. Collectively these lots are identified as the Affected Area. The existing zoning designation of R4-1 would change to R6B under the Proposed Actions.

Existing Conditions

Zoning Study Area

The zoning districts within 400 feet of the Affected Area are R4-1, R4A and R3-2.

Table 2.1-1: Summary of Existing Zoning Regulations

Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
R3-2	Residential UGs 1-4	0.5 FAR - Residential plus attic allowance* Single- and Two-Family and Multi-Family	1 per DU
R4-1	Residential UGs 1-4	0.75 FAR – Residential plus attic allowance* Single- and Two-Family Only	1 per DU
R4A	Residential UGs 1-4	0.75 FAR - Residential plus attic allowance* Single- and Two-Family Only	1 per DU

Source: Zoning Handbook, New York City Department of City Planning, January 2019

*Attic allowance permits up to a 20 percent increase in the maximum FAR for the provision of a pitched roof

Figure 2.1-1: Existing Zoning Map



Existing zoning districts in the surrounding area include:

R4-1

The Affected Area is within an R4-1 zoning district established in 2008, which extends to the south and east of the Affected Area. This zoning district is generally bound by Grasmere Terrace and President Street to the east, Brookhaven Avenue to the south, Ocean Crest Boulevard to the north and Bay 32nd Street to the west.

R4-1 contextual districts permit only one- and two family detached and semidetached houses. The R4-1 district requires a minimum lot width of 25 feet and permits residential floor area ratio (FAR) of 0.75 plus an attic allowance (up to a 20 percent increase in maximum FAR for the provision of a pitched roof). The perimeter wall may rise to 25 feet before sloping or being set back to a maximum building height of 35 feet. Two side yards that total eight feet must be provided for a detached residence. There is no minimum width for each side yard but there must be eight feet between buildings on adjacent zoning lots. One four-foot side yard is required for each semi-detached residence, which must be on a lot at least 18 feet wide. Zero lot line buildings permitted in R4-1 districts, require only one eight-foot side yard. Front yards must be at least 10 feet deep and at least as deep as an adjacent front yard but need not exceed a depth of 20 feet. Parking must be within the side or rear yard or in a garage. An in-house garage is permitted within a semi-detached house, or in a detached house if the lot is 35 feet or wider. One off-street parking space is required for each dwelling unit.

R4A

R4A is a contextual district that only permits one- and two-story detached houses. The maximum allowable residential FAR is 0.75 plus an attic allowance. The perimeter walls may rise 21 feet with a maximum height allowance of 35 feet

There is an R4A zoning district mapped to the west of the Affected Area generally between Beach Channel Drive to the south and Dwight Avenue to the north. A front yard must be at least as deep as an adjacent front yard and at least 10 feet deep, but it need not exceed a depth of 20 feet. A 30-foot-deep rear yard, and two side yards that total at least 10 feet with a minimum width of two feet each are also required. There must be at least eight feet between buildings on adjacent lots. Parking must be located in the side or rear yard and the driveway must be within the side lot ribbon. If the lot is 35 feet or wider, a garage is permitted within the house, provided the driveway is at least 18 feet deep to prevent cars from jutting onto the sidewalk. One off-street parking space is required for each dwelling unit.

R3-2

There is an R3-2 district located to the north of the Affected Area. R3-2 districts are general residence districts that allow a variety of housing types, including low-rise attached houses, small multifamily apartment houses, and detached and semi-detached one- and two-family residences. It is the lowest density zoning district in which multiple dwellings are permitted.

The 0.5 floor area ratio (FAR) may be increased by an attic allowance of up to 20% for the inclusion of space beneath a pitched roof. The perimeter wall may rise to 21 feet before sloping or being set back to a maximum building height of 35 feet. Lots with detached homes must be at least 40 feet wide; if occupied by semi-detached and attached buildings, lots must be at least 18 feet wide. The maximum street wall length for a building on a zoning lot is 125 feet. The maximum lot coverage of any residence is 35%. Front yards must be at least 15 feet deep and rear yards must be at least 30 feet deep. Single-family detached homes must have at least two side yards a minimum of 5 feet deep and 13 feet total; single-family semi-detached homes must have at least one side yard at a minimum of 8 feet deep; and multi-family homes must have a minimum of two side yards with an 8-foot minimum and 16 feet total. Cars may park in the side or rear yard, in the garage or in the front yard within the side lot ribbon; parking is also allowed within the front yard when the lot is wider than 35 feet. One off-street parking space is required for each dwelling unit.

Analysis

Future No-Action Condition

Zoning Study Area

No changes to zoning are anticipated in the future without the Proposed Actions in the surrounding area. The Projected Development Site would continue to be zoned R4-1 in the future without the Proposed Actions. The No-Action scenario involves the demolition of the existing vacant multi-family structure on Lot 55 and redevelopment with an 8,330 GSF (7,713 ZSF; .75 FAR) 2-family structure. Lot 4, which is currently a vacant lot, would be developed with a 4,333 GSF (4,166 ZSF; .75 FAR) 2-family structure. 2 parking spaces would be provided for each building for a total of 4 parking spaces.

No other changes are expected to occur in the absence of the Proposed Actions. Lots 55 and 4, which are projected to develop in the No-Action Scenario, are both owned by The Applicant, and plans for the demolition of the existing structure on Lot 55 have already been filed with the DOB. Block 15737 Lot 1 is occupied by a public school, Block 15737 Lot 10 is an undevelopable 5-foot-wide lot adjacent to this school. Block 15785, Lots 7 and 54 are developed with occupied detached residences and no change to their status is anticipated in the future without the Proposed Actions, and only a portion of each lot is included in the proposed Rezoning Area.

Future With-Action Condition

Outside of the Affected Area, no changes to zoning would occur in the surrounding area in the future with the Proposed Actions. The Proposed Actions would establish an R6B zoning district in the Affected Area. All of the lots in the Affected Area which are not applicant owned are not considered soft sites. Block 15737 Lot 1 is occupied by a public school, Block 15737 Lot 10 is an undevelopable 10-foot-wide lot adjacent to this school. The rezoning of small portions of Block 15785, Lots 7 and 54 would not significantly affect their developability.

Under the With-Action scenario the Projected Development Site (Block 15785, Lots 55 and 4) would be developed pursuant to R6B zoning with a 5-story building at a height of 50 feet. The building would contain 41,107 GSF (32,973 ZSF; 2.19 FAR) of floor area with 48 dwelling units, of which 12 would be classified as affordable. 20 parking spaces would be provided at the cellar level.

All other lots in the Project Area would remain in their Existing Condition in the With-Action

Conclusion

The Proposed Rezoning would allow a change in zoning that would permit slightly higher residential densities in a neighborhood characterized by a mix of multi-family residential apartments and one- and two-family houses, along with institutional uses. While this zoning designation is different from the surrounding area, the regulations and permitted uses in the R6B zoning designation are similar and compatible with the zoning designations in the surrounding area and would therefore not result in a significant adverse environmental impact.

2.1.3 Public Policy

The Development Site is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The Proposed Actions is also not a large publicly sponsored project, and as such, consistency with the City's PlaNYC 2030 for sustainability is not warranted.

The Affected Area is not located in a transit zone – where parking is optional for new affordable units. Additionally, the Project Area is located in a FRESH Zone, which promotes the establishment and expansion of neighborhood grocery stores in underserved communities by providing zoning and financial incentives. As the Proposed Actions do not include a supermarket or food store, the policy does not apply to the application.

The Affected Area is located in the Coastal Zone, and will fall partially within the 0.2% annual chance floodplain by the 2080s and partially within the 1% annual chance and 0.2% annual chance floodplain by the 2100s. Accordingly, an assessment for consistency with the Waterfront Revitalization Program (WRP) was conducted.

WATERFRONT REVITALIZATION PROGRAM ASSESSMENT

Because the Proposed Development Site is located within the boundaries of the New York City Coastal Zone and is subject to CEQR discretionary review procedures, the Proposed Actions must be reviewed and assessed for consistency with the policies and conditions set forth in the New York City Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation and public use of the waterfront, while minimizing any potential conflicts among these objectives.

The WRP Consistency Assessment Form (CAF) was completed (**Appendix B**) to determine if the Proposed Actions is consistent with the WRP policies. Additionally, while the Proposed Development Site is not within the 2007 Effective FEMA Flood Insurance Rate Map (FIRM) and the 2015 Preliminary FEMA Flood Insurance Map (PFIRM) 0.2% or 1% annual chance floodplain (*See* **Figure 2.1-3** below), the Site is anticipated to fall partially within the future 0.2% annual chance floodplain by the 2080s, and partially within the future 0.2% annual chance and 1% annual chance floodplain by the 2100s. Accordingly, the Flood Evaluation Worksheet was completed (*See* **Appendix B** and Policy 6.2 evaluation below). The Flood Evaluation Worksheet allows applicants to calculate future flood elevations and assess site-specific risks to vulnerable or critical project features.

Based on the information provided in the CAF, a Detailed Methodology and policy response is provided below, following the Definitions Section. The WRP assessment incorporates the findings of the Flood Evaluation Worksheet and the Proposed Actions consistency with the applicable WRP Policies and Sub Policies (1.1, 1.3, 1.5, 6.1, and 6.2).

Definitions

FEMA National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRMs)

In 1983, the City of New York joined the NFIP, managed by the Federal Emergency Management Administration (FEMA). FEMA provides flood insurance, improves floodplain management, and develops maps of flood hazard areas. Once the City joined the program and adopted the FIRMS, NFIP required the adoption and enforcement of flood resilient Building Code regulations pursuant to *Appendix G: Flood-Resistant Construction* of the NYC Building Code.

FIRMs/PFIRMs

Flood Insurance Rate Maps (FIRMs) identify buildings in the floodplain and are a tool used for assessing the applicability of Appendix G, as well as for calculating flood insurance rates. Flood Insurance Rate Maps (PFIRMs), reflect the best available information about the city's flood risks at this time. Compared to the FIRMs, the PFIRMs generally show a larger geography with higher flood elevations. Flood insurance rates in New York City are based on the 2007 effective FIRMs. Flood Insurance is required for property owners with federally backed mortgages located within the 1% annual chance floodplain, or the V or A zones as shown on the 2007 FIRM. Provisions of the Building

Code and Zoning Resolution will continue to be based on the 2007 FIRMs and the 2015 PFIRMs (*whichever is more conservative*).

Flood Zone Designations

Within the FIRMs, the floodplain is divided into different areas of risk; the V-Zone, A-Zone and Shaded X Zone. The PFIRMS divide the floodplain into four different areas of risk; the V-Zone, Coastal A Zone, A Zone, and Shaded X-Zone. The V and Coastal A Zones are vulnerable to waves, while the A zone is an area that is vulnerable to flooding but not wave damage. FEMA flood maps also show the Shaded X Zone, which is also known as the 0.2% annual chance, and has a lower annual chance of flooding than the A Zone. Buildings located in an X Zone are not currently required to comply with Appendix G of the Building Code.

- *Special Flood Hazard Areas – High Risk*
  Special Flood Hazard Areas represent the area subject to inundation by 1-percent-annual chance flood. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in these zones.

- *Coastal High Hazard Areas – High Risk*
  Coastal High Hazard Areas (CHHA) represent the area subject to inundation by 1-percent-annual chance flood, extending from offshore to the inland limit of a primary front al dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Structures located within the CHHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory purchase requirements apply in these zones.

- *Moderate and Minimal Risk Areas*
  Areas of moderate or minimal hazard are studied based upon the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in a community's flood insurance study. The failure of a local drainage system can create areas of high flood risk within these zones. Flood insurance is available in participating communities, but is not required by regulation in these zones. Nearly 25-percent of all flood claims filed are for structures located within these zones.

  *See **Table 2.1-2** below for a list of all FEMA zones:*

Table 2.1-2: FEMA FIRM Risk Zone Designations

ZONE	DESCRIPTION
High Risk Zones	
A	Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
AE, A1-A30	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)
AH	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone.
A	Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
AE, A1-A30	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)
AH	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone.
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are 1–3 feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.
AR	Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection.
A99	Areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. Zone A99 may be used only when the flood protection system has reached specified statutory progress toward completion. No BFEs or flood depths are shown.
Coastal Hazard Areas	
V	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves. Because detailed coastal analyses have not been performed, no BFEs or flood depths are shown.
VE, V1-V30	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. BFEs derived from detailed hydraulic coastal analyses are shown within these zones. (Zone VE is used on new and revised maps in place of Zones V1–V30.)
Moderate and Minimal Risk Areas	
B, X (shaded)	Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones. (Zone X (shaded) is used on new and revised maps in place of Zone B.)
C, X (unshaded)	Minimal risk areas outside the 1-percent and .2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. (Zone X (unshaded) is used on new and revised maps in place of Zone C.)
Undetermined Risk Areas	
D	Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Base Flood Elevation (BFE)

Besides designating the geography and risk profile where flood events are likely to happen the FIRMs also indicate the Base Flood Elevation (BFE), the computed elevation to which floodwater is anticipated to rise during a flood that has a 1% chance of occurring in any given year, also known as the 100-year flood zone.

Appendix G:

Appendix G requires owners of severely damaged or destroyed buildings in the 1% annual chance floodplain to comply with the flood resistant construction standards of the Building Code when they rebuild. The same requirements are applicable to any new development, or substantially improved properties, whether the development is located in whole or in part within the floodplain.

- *Substantially Damaged: Restoring Cost ≥ 50% Market Value*
- *Substantially Improved: Improvement Cost ≥ 50% Market Value*

Design Flood Elevation (DFE)

In addition to the adoption of the PFIRMs as another standard for how to design buildings in the flood zone, the Building Code was amended to require higher elevations for certain building types: Appendix G incorporates freeboard, an extra margin of protection that requires the lowest floor to be elevated beyond the BFE. This height standard is called the Design Flood Elevation (DFE), which is the BFE plus freeboard (an additional one to two feet of elevation as a measure of safety). DFE, used by the building code, is synonymous with Flood Resistant Construction Elevation (FRCE) used by zoning. Any space below that level needs to be wet-floodproofed or dry-floodproofed depending on the building use. For example, for buildings located within the A Zones, single- and two-family homes are required to provide two feet of freeboard, and mixed-use or multi-family buildings, are required to provide one foot of freeboard.

Wet and Dry Floodproofing (*See **Figure 2.1-2***)

There is a wide range of flood resilient construction practices that can enable buildings to withstand future flood events better. The most common of which are wet-floodproofing and dry-floodproofing, which can be utilized depending on building use category. Wet-floodproofing can be used by any building typology, while dry-floodproofing can only be deployed in non-residential uses. In general, buildings located in coastal areas subject to wave hazards (i.e., V Zone) are restricted from having any enclosed walls below the DFE and must elevate all active uses and mechanical systems. Buildings located in coastal areas that are not subject to wave hazards (i.e., A Zone) can be wet- or dry-floodproofed.

- *Wet-floodproofing: method designed to allow the passage of water within parts of the structure that are located below the flood elevation, while ensuring that the structure resists water loads. Wet-floodproofed areas can only be used as crawl space, or for parking, storage and access.*

- *Dry-floodproofing: method designed to seal a building's exterior walls to flood waters while ensuring that the building has the ability to resist water loads below the expected level of flooding.*

Flood Resilience Zoning Text

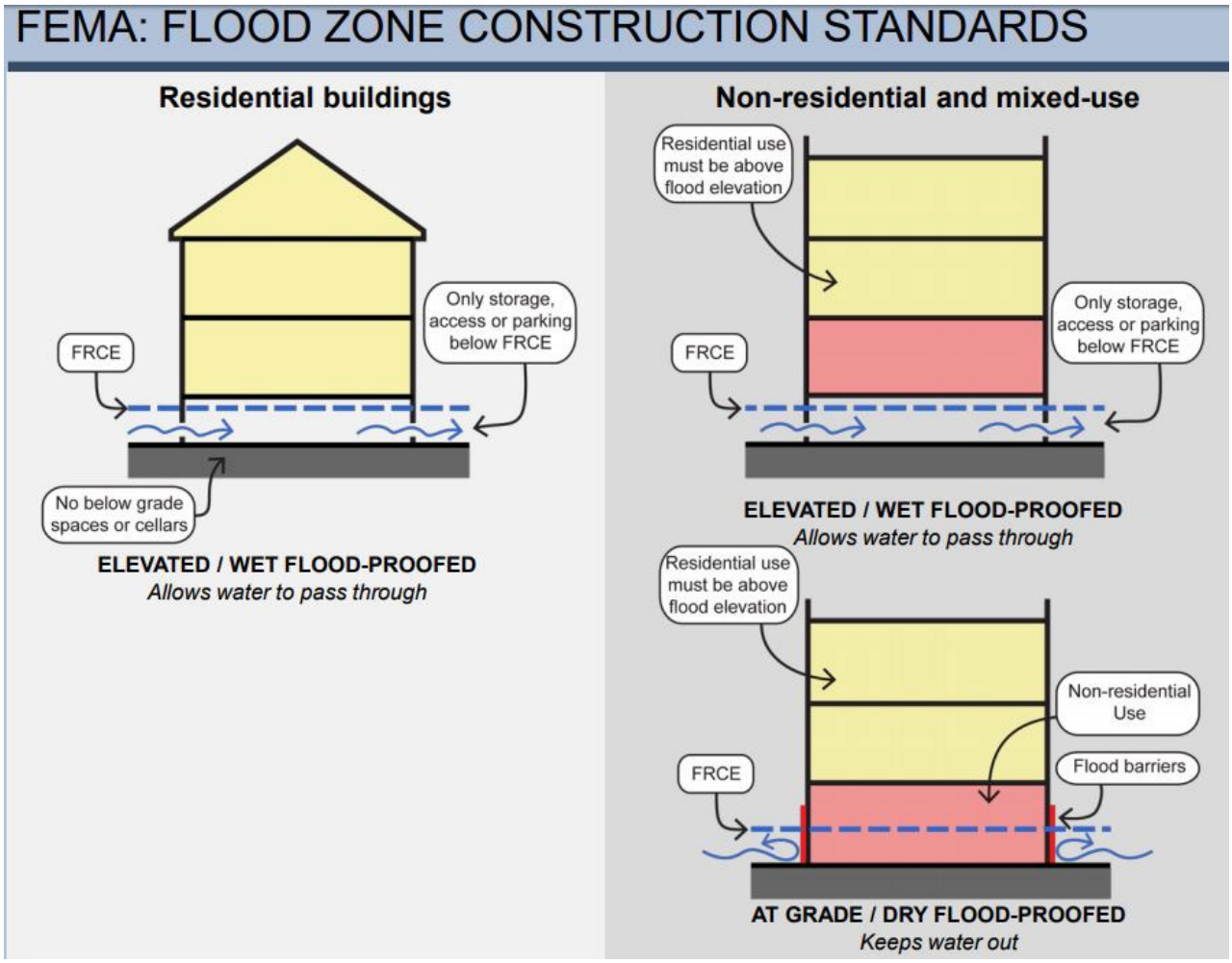
The Flood Resilience Zoning Text was established to promote rebuilding and recovery after Hurricane Sandy, and increase the city's resilience to climate-related events, including coastal flooding and storm surge. Pursuant to Chapter 4, Section 64-00 of the Zoning Resolution of the City of New York ("ZR") this text was established for the following general purposes:

(a) To facilitate the development and alteration of buildings in flood zones consistent with the latest flood-resistant construction standards of the Federal government and the New York City Building Code;
(b) To enable buildings to be constructed pursuant to flood-resistant standards with comparable amount of usable interior space to what is generally permitted within the applicable zoning district;
(c) To mitigate the effects of elevated and flood-proofed buildings on the streetscape and pedestrian activity;
(d) To expedite the recovery of neighborhoods that experienced a high concentration of damage to single- and two-family residences from Hurricane Sandy within the Neighborhood Recovery Areas Specified in Chapter 4, Appendix A; and
(e) To promote the most desirable use of land and thus conserve and enhance the value of land and buildings, and thereby protect the City's tax revenue.

The Flood Text encourages flood-resilient building construction throughout designated floodplains by removing regulatory barriers that hinder or prevent the reconstruction of storm-damaged properties. It also enables new and existing buildings to comply with new, higher flood elevations issued by the Federal Emergency Management Agency (FEMA), and to comply with new requirements in the New York City Building Code.

The Flood Text is available to all buildings located entirely or partially within the 1% annual chance floodplain pursuant to the more restrictive of the 2007 FIRMs or 2015 PFIRMs. The Flood Text specifies special regulations related to building height, access, ground floor use, parking, mechanical systems, and streetscape design, as further described below. These regulations, if utilized, typically require the building to fully comply with flood- resistant construction standards. However, some provisions, such as elevation of mechanical spaces, are available to all buildings located in the Flood Zone, even if not fully compliant with Appendix G.

Figure 2.1-2: Flood Zone Construction



<u>Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development</u>

Sub-Policy 1.1: Encourage commercial and residential development in appropriate coastal zone areas.

Criteria that should be considered to determine areas appropriate for reuse through public and private actions include: compatibility with the continued functioning of the designated Special Natural Waterfront Areas, the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or Significant Maritime and Industrial Areas, where applicable; the absence of unique or significant natural features or, if present, the potential for compatible development; the presence of substantial vacant or underused land; proximity to existing residential or commercial uses; the potential for strengthening upland residential or commercial areas and for opening up the waterfront to the public; transportation access; the maritime and industrial jobs potentially displaced or created; and the new opportunities created by redevelopment. Public actions—

such as property disposition, urban renewal plans, and infrastructure provision—should facilitate redevelopment of underused property to promote housing and economic development and enhance the city's tax base, subject to consideration of Policy 2, where applicable.

The Proposed Actions are consistent with this sub policy. The Proposed Action would allow redevelopment of two underutilized lots along a major corridor in close proximity to public transportation that is well served by local commercial services, open space, and community facilities.

Sub-Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed

The Affected Area is within close proximity to rail and bus transit, local-serving retail and commercial services, and community facilities. The surrounding area is primarily a medium-density residential area.

The Proposed Actions would effectuate the redevelopment of a vacant lot and a lot currently occupied by a vacant three-story three-family residential structure with medium density residential development. As such, the Proposed Actions would encourage redevelopment that provides housing in an area well served by mass transit and access to regional highways. The Project Site is well suited for medium-density residential use as it is within an urbanized area and would connect with the surrounding residential neighborhoods. Therefore, the Proposed Actions is consistent with Sub Policy 1.3.

Sub-Policy 1.5: Integrate Consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development pursuant to WRP Policy 6.2

Projects should consider potential risks related to coastal flooding to features specific to each project, including, but not limited to, critical electrical and mechanical systems, residential living areas, and public access areas.

As described further below under Policy 6.2, the proposed project would incorporate building-scale flood resiliency measures to protect critical and venerable building features from future flood risks. Therefore, the Proposed Action is consistent with Policy 1.5.

Policy 6: Minimize Loss of Life, Structures, Infrastructure, And Natural Resources Caused by Flooding And Erosion, And Increase Resilience To Future Conditions Created By Climate Change.

Sub-Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.

Under Policy 6, the primary goal for projects within current or future flood hazard areas is to reduce the risks posed by current and future flood events, mainly major storms that are likely to increase

due to climate change and sea level rise. As indicated below in **Figure 2.1-3,** the Projected Development Site is not located within the 2007 FIRMs and 2015 PFIRMS 0.2% annual chance floodplain (500-year flood zone) or 1% annual chance floodplain (100-year flood zone). However, as shown below in **Figure 2.1-4** to **Figure 2.1-7**, which reference the New York City Panel on Climate Change (NPCC) future floodplain projections through the 2100s, the Projected Development Site is anticipated to fall partially within the future 0.2% annual chance floodplain by the 2080s, and partially within the future 0.2% annual chance and 1% annual chance floodplain by the 2100s.

As indicated below under Sub-Policy 6.2, the flood evaluation worksheet was completed for the Projected Development Site to determine potentially vulnerable and critical building features that could be damaged by future flood events or inundation in the absence of design considerations such as building-scale flood resiliency measures. Based on the completed flood evaluation, the Applicant would consider incorporating future building scale resiliency measures in the design of the Proposed Development. Accordingly, the Proposed Action is consistent with this sub policy.

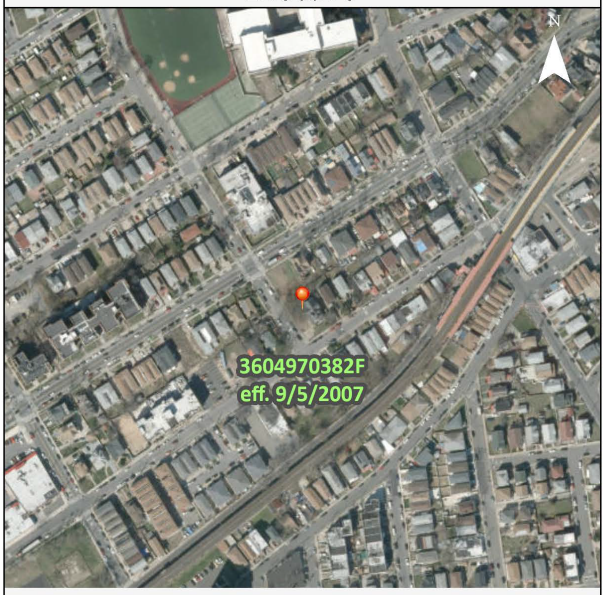
Figure 2.1-3: 2007 FIRM vs. 2015 PFIRM

Comparison of Flood Hazard

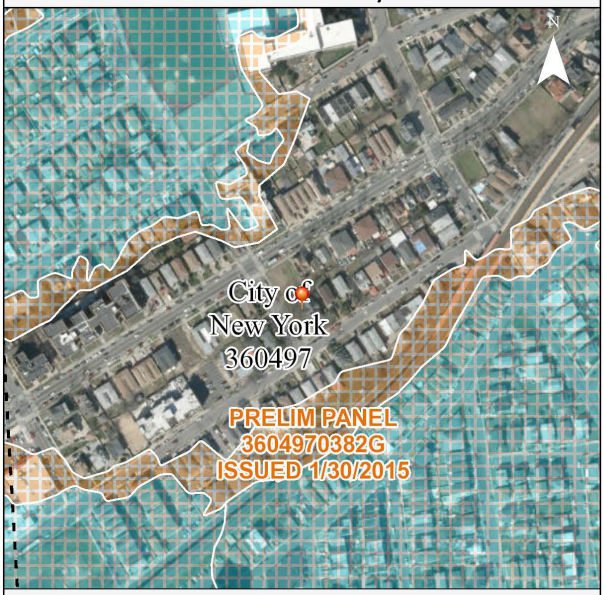
Effective & Preliminary Flood Hazards

FEMA

Effective



Preliminary



Effective	
POI Longitude/Latitude	-73.7634, 40.5995
Effective FIRM Panel	3604970382F
Effective Date	9/5/2007
Flood Zone	X
Static BFE*	Not Available
Flood Depth	Not Available
Vertical Datum	Not Available

Preliminary	
POI Longitude/Latitude	-73.7634, 40.5995
Preliminary FIRM Panel	3604970382G
Preliminary Issue Date	1/30/2015
Flood Zone	X
Estimated Static BFE*	Not Available
Estimated Flood Depth	Not Available
Vertical Datum	Not Available

* A **Base Flood Elevation** is the expected elevation of flood water during the 1% annual chance storm event. Structures below the estimated water surface elevation may experience flooding during a base flood event.

Hazard Level	**Flood Hazard Zone**
High Flood Hazard	**AE, A, AH, AO, VE and V Zones.** Properties in these flood zones have a 1% chance of flooding each year. This represents a 26% chance of flooding over the life of a 30-year mortgage.
Moderate Flood Hazard	**Shaded Zone X.** Properties in the moderate flood risk areas also have a chance of flooding from storm events that have a less than 1% chance of occuring each year. Moderate flood risk indicates an area that may be provided flood risk reduction due to a flood control system or an area that is prone to flooding during a 0.2% annual chance storm event. These areas may have been indicated as areas of shallow flooding by your community.
	Unshaded Zone X. Properties on higher ground and away from local flooding sources have a reduced flood risk when compared to the Moderate and High Flood Risk categories. Structures in these areas may be affected by larger storm events, in excess of the 0.2% annual chance storm event.
Low Flood Hazard	**Insurance Note:** High Risk Areas are called 'Special Flood Hazard Areas' and flood insurance is mandatory for federally backed mortgage holders. Properties in Moderate and Low Flood Risk areas may purchase flood insurance at a lower-cost rate, known as Preferred Risk Policies. See your local insurance agent or visit https://www.fema.gov/national-flood-insurance-program for more information.

Disclaimer: This report is for informational purposes only and is not authorized for official use. The positional accuracy may be compromised in some areas. Please contact your local floodplain administrator for more information or go to msc.fema.gov to view an official copy of the Flood Insurance Rate Maps.

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Figure 2.1-4: 2020s Flood and High Tide Projections



Figure 2.1-5: Future 2050s Flood and High Tide Projections





Figure 2.1-6: Future 2080s Flood and High Tide Projections





Figure 2.1-7: Future 2100s Flood and High Tide Projections



Sub-Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

The following assessment was prepared in accordance with *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance Document for Policy 6.2.*

The three basic steps to assessing an action's consistency with Policy 6.2 of the Waterfront Revitalization Program include identifying vulnerabilities and consequences, identifying adaptive strategies, and assessing policy consistency.

Sub-Policy 6.2 Detailed Methodology

1. Identify Vulnerabilities and Consequences

a) Assess the Project Area's Exposure to current and future flood risk (Flood-Evaluation Worksheet)

The information in the following subsections is based on the results of the completed flood evaluation worksheet, which is provided in **Appendix B**.

The Proposed Development's first-floor level is located approximately 15' in elevation above grade (NAVD88 Datum). The cellar level is located at approximately 5' in elevation (NAVD88 Datum). The Proposed Building's vulnerable or critical features, which are most likely to be impacted by future flood events, are located on the cellar and first floor levels.

Regulatory floodplains are defined by the elevation of the base flood (BFE) in relation to the elevation of the ground. According to datum (NAVD88) obtained from the National Oceanic and Atmospheric Administration (NOAA)[1] website for the nearest NOAA station, Beach Channel Station (Station ID 8517137), the mean higher high-water height (MHHW) is 2.43 feet (adjusted). Pursuant to the 2015 PFIRMs, the 1% flood height is 10 feet for the nearest 1% flood zone, and the design flood elevation (DFE) is 11 feet.

Based on the results of the calculations completed in the flood evaluation worksheet using site-specific data, **Figure 2.1-8** shows the results of the 1% Flood Elevation and Sea Level Rise (SLR) projections, and **Figure 2.1-9** shows the results of the MHHW and SLR projections.

[1] https://tidesandcurrents.noaa.gov/datums.html?id=8518699

Figure 2.1-8: 1% Flood Elevation and SLR Projections

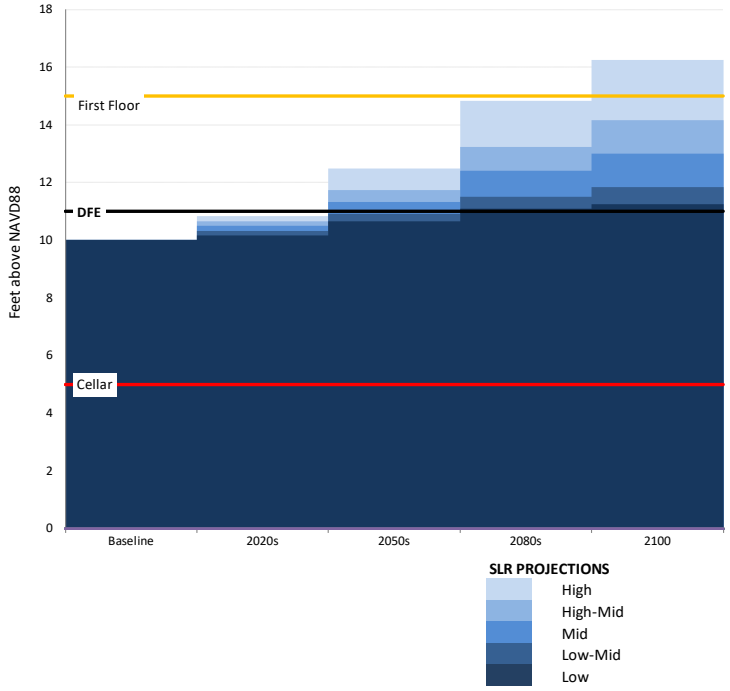
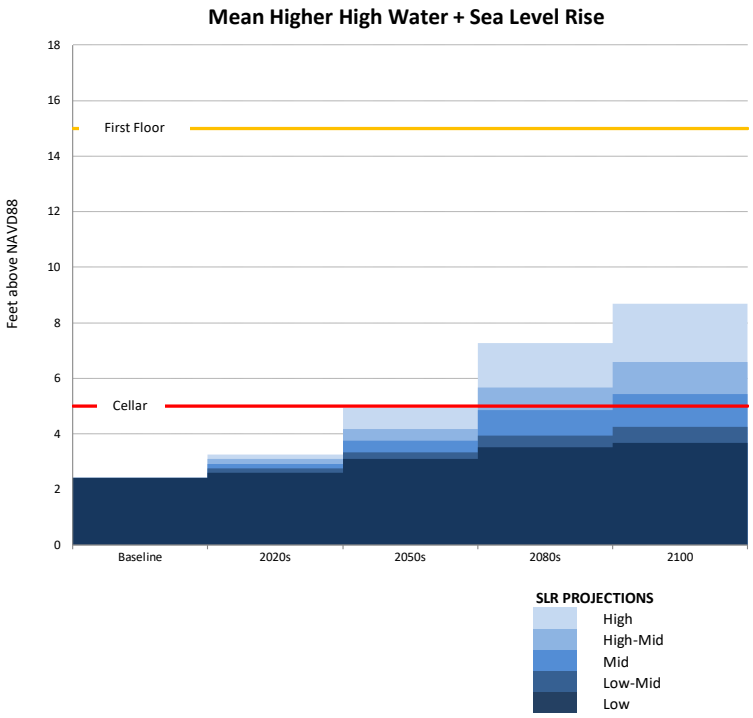


Figure 2.1-9: MHHW and SLR Projections



As indicated in **Figure 2.1-7** and **2.1-8** above, the Proposed Development's first-floor level would fall within the 1% annual chance floodplain by the 2100s under high SLR projections.

As shown in **Figure 2.1-7**, based on the New York City Panel on Climate Change (NPCC) future floodplain projections, the building would not be within the 1% annual chance floodplain until the 2100s. Thus, the cellar is not projected to be below the 1% annual chance flood elevation until the 2100s.

As indicated in **Figure 2.1-7** and **Figure 2.1-9** above, the Proposed Development's first-floor level would not be impacted by the MHHW under any SLR projections. As indicated in **Figure 2.1-7** above, based on the New York City Panel on Climate Change (NPCC) future floodplain projections, the cellar level would not be subject to tidal flooding through the 2100s.

b) Identify any Project Features that may be located below the elevation of the 1% floodplain over the lifespan of the project under any SLR scenario:

The cellar and first floor levels are projected to be below the 1% annual chance flood elevation by the 2100s. The 13,469 sq. foot cellar includes 20 enclosed parking stalls, elevator pits, and two parking elevators. The 6,500 sq. foot first floor includes 8 apartments, and 4 lobbies with elevators to the upper floors.

c) Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.

The Proposed Development's cellar and first-floor levels would not be impacted by the MHHW under any SLR projections.

d) Identify if the project or action would facilitate the development of any vulnerable, critical, or potentially hazardous features, as defined under "Key Terms" below, within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections:

Vulnerable, Critical or Potentially Hazardous Features pursuant to Policy 6.2 guidance:

- *Vulnerable Features, if damaged, have the potential to incur significant damage if flooded.*

  These include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures; storage areas; enclosed recreational facilities; and bulkheads, revetments, piers, platforms, and other in-water infrastructure elements.

- *Critical Features, if damaged, would have severe impacts on the project and its ability to function*

  The project features that, if damaged, would have severe impacts on the project and its ability to function as designed. Examples include electrical utilities, building heating and cooling systems, telephone and data connection and distribution rooms, and other supporting and related building technology and utility spaces.

- *Potentially Hazardous Features, if damaged or made insecure by flooding, could potentially adversely affect the health and safety of the public and the environment.*

  Examples include hazardous materials, including highly volatile, flammable, explosive, toxic, or water-reactive materials; and materials that have the potential to become waterborne in the event of a flood and would be dangerous to the health and safety of the public and the environment, such as the storage of construction materials, demolition debris, and aggregate materials.

No building features would be introduced pursuant to the Proposed Action that have the potential to be exposed to flooding from MHHW or a 1% annual chance flood event by the 2050s. In addition, the project would not contain any hazardous materials or substances that if made insecure, would result in a threat to public health or the environment.

2. Identify Adaptive Strategies

The goal of Step 2 under WRP Policy 6.2 is to assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning. Assess how applicable codes and regulations, planned flood damage reduction elements and adaptive measures, or likely future infrastructure investments (beyond the scope of the proposed project), would or would not reduce potential flood damage for any proposed vulnerable, critical, or potentially hazardous features.

Because the Projected Development Site is susceptible to the impacts of future flood events by the 2100s, it is recommended that building scale resiliency measures and flood mitigation strategies be considered at the cellar level. Pursuant to Policy 6.2: Climate Change Adaptation Guidance, consideration of climate change projections for coastal flooding and sea level rise should be incorporated into the design and planning of projects. The proposed project should identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over its lifespan and identify and incorporate design techniques to address these risks.

a) Flood Damage Reduction Elements/Controls

The Project Site is not located within the current 1% annual chance floodplain and is therefore not required to comply with Appendix G of the NYC Building Code for Flood Resistant Construction; however, based on the flood projections discussed above, the Proposed Project

should consider employing future building-scale resiliency measures for the cellar and first floor levels to avoid the potential risks related to future coastal flooding. The cellar level is considered most susceptible to future flood events, and contains the building's critical features. The cellar level would contain vulnerable building features (walls, electrical, parking and enclosed building space) and critical building features (elevators and elevator pits).

The Applicant has been educated about future flood risks to the Proposed Development, and the following flood resilience techniques and controls will be considered in the building design to increase building-scale resilience to future flood conditions, and to minimize future damage and vulnerability to the proposed building's cellar and first floor levels.

- The cellar walls and flooring would be constructed of concrete or CMU, or other water-resistant building materials, without drywall or water-permeable facings;
- The cellar level outlets would be elevated;
- The cellar level parking will allow for the automatic entry and exit of floodwaters by means of breakaway enclosures with grills and will have a flood elevation equal to or higher than the outside existing grade on at least one side, and the outside grade will slope down towards the source of flooding, providing positive drainage by gravity;
- The elevator pits would incorporate elastomeric waterproofing membrane on the walls and floors;
- The elevator pits would include sump pumps, reinforced shafts below the DFE, and flood alarms;
- The elevator controls would be set to prevent the cab from lowering into floodwater
- The elevators control room would be located above the DFE on the rooftop; and
- The buildings heating and cooling system condensers (split system) would be located on the roof.

While not required, these building scale resiliency measures would help prevent damage to vulnerable and critical building features and reduce the susceptibility of water damage from a future flood event or inundation. With the provision of the above, the building features would not be considered vulnerable or critical.

b) Flood Protection of Adjacent Sites:

The Proposed Development would result in an approximately 41% lot coverage, which would not significantly increase stormwater runoff. Therefore, the proposed action would not affect the flood protection of adjacent sites.

3. Assess Policy Consistency

A project or action would advance the policy when:

- No new vulnerable, critical, or potentially hazardous features would be located within area flooded by current or future high tide, or current or future 1% annual chance flood, over the project's lifespan; or
- All new vulnerable, critical or potentially hazardous features would be protected through flood damage reduction elements or future adaptive measures within the timeframe that they would be needed.

A project or action would hinder the policy when:

- Vulnerable, critical, or potentially hazardous features would be introduced in areas that will be flooded by high tide during the project's lifespan and adaptive measures are not feasible.
- Industrial development would not be protected from 2050s high tides or the current 1% annual chance flood.
- Critical infrastructure would not be protected to the elevation of the 1% annual chance storm over its lifespan.
- Shoreline structures would not function as intended with increases in sea levels projected over their lifespan.

The Development Site is not within a current 1% annual chance floodplain, and the Proposed Development is therefore not subject to flood resilient construction requirements outlined in Appendix G of the NYC Building Code. However, as discussed above, the future flood projections and risks have been disclosed to the Applicant and project architect, and floodproofing of the cellar level would be employed. These future building-scale resiliency measures and adaptive strategizes, as referenced above, would minimize the potential damage to site-specific vulnerable or critical features. Therefore, the Proposed Action is consistent with Policy 6.2 of the Waterfront Revitalization Program and would not jeopardize the intent of the WRP.

Conclusion

Significant adverse impacts to public policy are not anticipated as a result of the Proposed Actions and further analysis is not warranted.

2.2 Shadows

The *2021 CEQR Technical Manual* defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space, or feature. An incremental shadow is the additional or new shadow that a building or other built structure resulting from a proposed project would cast on a sunlight-sensitive resource during the year. The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources, and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use and important landscaping and vegetation. In general, increases in shadow coverage make parks feel darker and colder, affecting the experience of park patrons. Shadows can also have impacts on historic resources whose features are sunlight-sensitive, such as stained-glass windows, by obscuring the features or details, which make the resources significant.

The duration and dimensions of shadows are determined by the geographic location of the area from which the shadow is cast and the time of day and season. Shadows cast during the morning and evening, when the sun is low in the sky, are longer, while midday shadows are shorter in length. Shadows in winter, when the sun arcs low across the southern sky, are also longer throughout the day than at corresponding times in spring and fall seasons. In summer, the high arc of the sun casts shorter shadows than at any other time of year, and early and late shadows during the summer are cast towards the south than shadows cast in early and late winter months.

The *2021 CEQR Technical Manual* states that a shadow assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. Therefore, a shadow assessment is warranted only if the project would either result in (a) new structures (or additions to existing structures including the addition of rooftop mechanical equipment) of 50 feet or more; or, (b) be located adjacent to, or across the street from, a sunlight-sensitive resource. However, a project located adjacent to or across the street from a sunlight-sensitive open space resource (which is not a designated New York City Landmark or listed on the State/National Registers of Historic Places, or eligible for these programs) may not require a detailed shadow assessment if the project's height increase is ten feet or less.

The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. In general, shadows on city streets and sidewalks or on other buildings are not considered significant. Some open spaces also contain facilities that are not sensitive to sunlight. These are usually paved such as handball or basketball courts, contain no seating areas and no vegetation, no unusual or historic plantings, or contain only unusual or historic plantings that are shade tolerant. These types of facilities do not need to be analyzed for shadow impacts. Additionally, it is generally

not necessary to assess resources located to the south of projected development sites, as shadows cast by the action-generated development would not be cast in the direction of these resources. Furthermore, shadows occurring within one and one-half hour of sunrise or sunset generally are not considered significant in accordance with the *2021 CEQR Technical Manual*.

Methodology

A preliminary analysis of shadows follows the guidelines set forth in Chapter 8, Section 310 of *the 2021 CEQR Technical Manual*. According to the *2021 CEQR Technical Manual*, a preliminary shadow assessment includes the development of a base map showing the site location in relation to any sunlight-sensitive resources. Following these guidelines, the longest shadow Study Area is determined, and a Tier 1 screening assessment is conducted to determine if any sunlight-sensitive resources fall within the Study Area. If no resources are found, no further analysis would be needed. If sunlight-sensitive resources lay within the longest shadow Study Area, the next tier of screening assessment should be conducted. This preliminary assessment includes a basic description of the proposed project that would be facilitated by the Proposed Actions, in order to determine whether a more detailed assessment would be appropriate.

2.2.1 Tier 1 Screening Assessment

The shadow assessment begins with a preliminary screening assessment to ascertain whether a project's shadow may reach any sunlight-sensitive resources at any time of the year. If the screening assessment does not eliminate this possibility, a detailed shadow analysis may be warranted to determine the extent and duration of the net incremental shadow resulting from the project. The effects of shadows on a sunlight-sensitive resource are site-specific; therefore, as directed in the *2021 CEQR Technical Manual*, the screening assessment was performed for the relevant project site and projected development sites to determine whether they fall within the range of maximum possible shadow cast on potential sunlight sensitive resources as described above. To determine this, a Tier 1 Screening Assessment was performed in accordance with the *2021 CEQR Technical Manual*.

1) A buffer map (*see* **Figure 2.2-1**) was prepared to display the maximum possible shadow that could be cast from the Proposed Development. This shadow cast was derived by multiplying 55' (50' as the total the total height of the proposed building plus a 5' bulkhead) by 4.3 (the CEQR Technical Manual multiplier representing the maximum shadow cast from any object as being 4.3 times its height). This map also shows sunlight sensitive resources within the Shadow Study Area

2) The potentially impacted area of shadow from each projected site was then compared to those resources identified below to see if any fell within the shadow cast area.

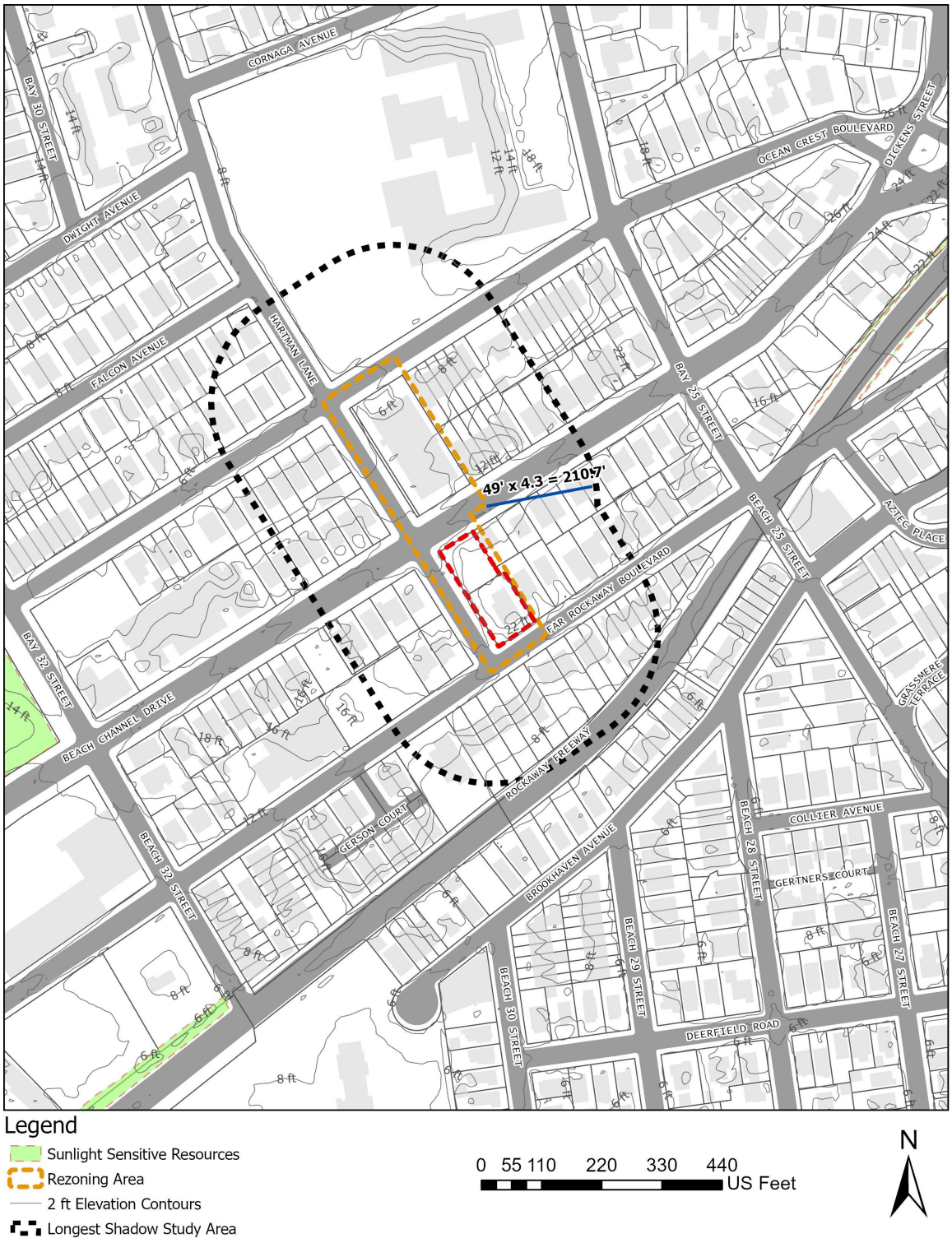
Based on the Tier 1 Analysis shown in **Figure 2.2-1**, it was determined that no sunlight sensitive resource is within reach of the longest possible shadow that could be cast from the Proposed Development.

Conclusion

No Sunlight Sensitive Resources would be reached by the project-generated shadow, and would therefore, no sunlight sensitive resources would be impacted by the development.

As such, the Proposed Actions would not affect the vitality or usage of any sunlight sensitive resources identified in the Study Area, and significant adverse impacts from shadows would not result from the Proposed Actions and no further analysis is required.

Figure 2.2-1: Tier 1 Shadow Assessment



2.3 Historic and Cultural Resources

An assessment of historic and cultural resources is usually necessary for projects that are located in close proximity to historic or landmark structures or districts, or for projects that require inground disturbance unless such disturbance occurs in an area that has been formerly excavated. The term "historic resources" defines districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, architectural and archaeological importance. In assessing both historic and cultural resources, the findings of the appropriate city, state, and federal agencies are consulted. Historic resources include: the New York City Landmarks Preservation Commission (LPC) designated landmarks, interior landmarks, scenic landmarks, and historic districts; locations being considered for landmark status by the LPC; properties/districts listed on, or formally determined eligible for, inclusion on the State and/or National Register (S/NR) of Historic Places; locations recommended by the New York State Board for Listings on the State and/or National Register of Historic Places and National Historic Landmarks.

2.3.1 Architectural Resources

Per *2021 CEQR Technical Manual* guidelines, impacts on historic resources are considered on those sites affected by the Proposed Actions and in the area surrounding identified development sites. Generally, architectural resources should be surveyed and assessed if the proposed project would result in any of the following, whether or not any known historic resources are located near the site of the project:

- New construction, demolition, or significant physical alteration to any building, structure, or object.
- A change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed. For example, a building may be part of an open setting, such as a tower within a plaza, which is either conforming or non-conforming with the street wall in terms of its height, footprint, and/or setback. Visual context is the character of the surrounding built or natural environment. This may include the following: the architectural components of an area's buildings (e.g., height, scale, proportion, massing, fenestration, ground-floor configuration, style), streetscapes, skyline, landforms, vegetation, and openness to the sky.
- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects.
- Additions to or significant removal, grading, or replanting of significant historic landscape features.
- Screening or elimination of publicly accessible views.
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows on a historic landscape or on a historic structure if the features that make the structure significant depend on sunlight.

The Architectural resources Study Area is defined as the project site, plus an approximately 400-foot radius around the Affected Area. To determine whether the Projected Development has the potential to affect nearby off-site historic or architectural resources, the Study Area was screened for historic and architectural resources. No significant architectural resources were identified within the Study Area. The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received December 6th, 2018, indicating that the Proposed Development would not affect any known architectural resources (see **Appendix C**).

2.3.2 Archaeological Resources

Unlike the architectural evaluation of a Study Area that extends beyond a project's property lines, the analysis of potential and/or projected impacts to archaeological resources is limited to the actual extent of soil disturbance. Archeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells, and privies. The *2021 CEQR Technical Manual* requires a detailed evaluation of a project's potential effect on the archeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated. The project would result in an in-ground disturbance to develop the proposed mixed-use building. As noted, the LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received December 6th, 2018, (see **Appendix C**). The LPC has indicated that no archaeological significance is associated with the Projected Development. Therefore, significant adverse impacts to archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

Conclusion

The LPC has indicated that no architectural or archaeological significance is associated with the Projected Development or Rezoning Area. Therefore, significant adverse impacts to architectural and archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

2.4 Urban Design and Visual Resources

According to the *2021 CEQR Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings.

Pursuant to the *2021 CEQR Technical Manual*, an assessment of Urban Design may be warranted when a Proposed Actions may affect one or more of the elements that contribute to the pedestrian experience of an area, specifically the arrangement, appearance, and functionality of the built environment. As stated in the *CEQR Technical Manual*, the Study Area for urban design is the area where the project may influence land use patterns and the built environment and is generally consistent with the Study Area used for the land use analysis (i.e., 400 feet around the project sites). For visual resources, existing publicly accessible view corridors within the Study Area should be identified. The purpose of the preliminary assessment is to determine whether any physical changes proposed by a project may raise the potential to significantly and adversely affect elements of urban design, which would warrant the need for a detailed urban design and visual resources assessment.

2.4.1 Urban Design

This analysis focuses on the components of the proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment. The analysis relies on drawings, maps, renderings, photographs and photo montages taken from the pedestrian eye level.

Chapter 10 of the *2021 CEQR Technical Manual* addresses whether and how a project might change the experience of a pedestrian in the Study Area. More precisely, this section is concerned with "the arrangement, appearance, and functionality of the built environment." The proposed development is a 5-story multi-family residential apartment building. This use is consistent with the uses that characterize the neighborhood.

An analysis of the impact on urban design requires consideration of the degree to which a project would result in a change to the built environment's arrangement, appearance, or functionality and whether the change would negatively affect a pedestrian's experience of the area. One important consideration is a project's context, such as the scale and use of surrounding buildings. However, matching context is not necessarily the sole benchmark for measuring urban design impacts.

Photographic evaluation of the Affected Area as well as a photo-montage with project massing is provided to illustrate the built form of the project in context of surrounding conditions. A narrative describing the existing built environment, and the proposed development's relationship to the surrounding area is included as part of this technical section**.**

Existing Conditions

Projected Development Site

Block 15785 Lot 55 and 4 are Applicant owned and located at 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive. Collectively, the two properties comprise the 15,044 square-foot Projected Development Site. 25-46 Far Rockaway Boulevard has a 2,228 GSF vacant three-story residential structure that was constructed in 1931; the building has an aluminum siding façade, a large front porch facing Far Rockaway Boulevard and a large front yard, and is on a wooded corner lot. 25-47 Beach Channel Drive is a vacant parcel. Historically, this property had a single-family home, but it suffered total damage during a fire and as a result, the property had been cleared.

Surrounding Area

The *2021 CEQR Technical Manual* suggests that a land use, zoning and public policy Study Area should extend 400-feet from the site of the Proposed Actions. A ground level photograph map key is provided in the previously presented **Figure 1-7**, with ground-level photographs of the Project Site and the immediate surrounding area. As illustrated by **Figure 1-7,** there are no significant visual resources or natural features located in or around the Proposed Site, as defined by the *2021 CEQR Technical Manual*, nor are there any visual or physical resources that connect the public realm to natural or built features of any significance.

Existing structures within the surrounding area include an eclectic mix of detached one- and two-family homes ranging from 1- to 2.5-stories and include colonial, craftsmen, and split-level style homes. Building facades include brick, siding, and stone, and a large majority of homes in the area include fenced-in front yards, stoops, and driveways for parking. Brick rowhomes exist along Beach Channel Drive and Ocean Crest Boulevard.

No-Action Condition

The No-Action scenario involves the demolition of the existing vacant multi-family structure on Lot 55 and redevelopment with an 8,330 GSF (7,713 ZSF; .75 FAR) 2-family structure. Lot 4, which is currently vacant, would be developed with a 4,333 GSF (4,166 ZSF; .75 FAR) 2-family 2.75 story structure. Additionally, 2 parking spaces would be provided for each building for a total of 4 parking spaces. The rehabilitation and reoccupation of the building on Lot 55 is not feasible as the building is not structurally sound.

No other changes are expected to occur in the absence of the Proposed Actions. Lots 55 and 4, which are projected to develop in the No-Action Scenario, are both owned by The Applicant, and plans for the demolition of the existing structure on Lot 55 have been filed with the DOB.

Additionally, based on permits issued by the DOB for the surrounding area, there are nine major construction projects underway within 400 feet of the proposed Rezoning Area—three

along Ocean Crest Boulevard to the northwest, and five along Brookhaven Avenue and Beach 28th Street to the southeast. These nine active projects will each construct a new three-story residential building that includes two dwelling units each, in line with the existing context of the area.

Given the increasing population in the area (based off 2010 Census and 2016 ACS data), rising 1- and 2-family home costs (review of property price trends in the area), and significant new residential construction nearby, the development of Lots 55 and 4, which would maximize dwelling units, can be expected to occur.

With-Action Condition

Projected Development Site 1

Under the With-Action scenario the Projected Development Site (Block 15785, Lots 55 and 4) would be developed pursuant to R6B zoning with a 5-story building at a height of 50 feet. The building would contain 41,107 GSF (32,973 ZSF; 2.19 FAR) of floor area with 48 dwelling units, of which 12 would be classified as affordable. 20 parking spaces would be provided.

Residential land use immediately surrounding the Projected Development Site is comprised of one- and two-family residential structures, but multiple large-scale multifamily buildings are located within two blocks: 29-32 Beach Channel Drive is a 6-story, 107-unit multifamily elevator building; 29-64 Beach Channel Drive is a 5-story, 99-unit multifamily elevator building; and at 3-33 Seagirt Boulevard is Seaview Towers, a 2-building, 20-story, 462-unit apartment complex.

The sidewalks are in a well-connected grid system, and are in good repair throughout the Study Area, with access to an elevated subway station and ample open space via Bayswater Park and the Norton Basin Natural Resource Area. Residential structures in the area are not built out to their lot lines, and the front yard setbacks provide presence and scale to the pedestrian experience.

While the Proposed Actions would result in a structure taller (4 stories) than the other structures on the subject block (1 to 2.5 stories), it would not be the tallest structure in the area: a 5-story, approximately 50-foot-tall nursing home is located 315 feet southwest of the Project Site along Far Rockaway Boulevard, in addition to the previously mentioned 6-story and 5-story multifamily buildings along Beach Channel Drive. The With-Action condition would improve the condition of the Affected Area by infilling two vacant and unutilized parcels in the neighborhood. Furthermore, the existing 3-story vacant residential structure on Block 15785, Lot 55 of the Projected Development Site would be demolished to make way for the new structure. Thus, the Proposed Actions would assist in mending the urban fabric of the Surrounding Area by providing quality urban infill, enhancing the quality and safety of the Affected Area and Surrounding Area.

Since the Projected Development Site has street frontage on Far Rockaway Boulevard, Hartman Lane and Beach Channel Drive, the total linear feet of streetscape that would be improved from a vacant and abandoned state to a streetscape with a new, quality structure that introduces "eyes of the street", thus improving public safety is important to consider. While the existing neighborhood is characterized by buildings of about 6-stories or less, there are significantly taller residential elevator buildings just outside of the 400-foot Study Area. For instance, the Seagirt Towers are located to the southwest, just outside the Study Area off the Far Rockaway Freeway. These two towers are 20-stories tall, possessing a total of 449,000 GSF and 462 residential units. They were originally constructed in 1975, and subsequently altered in 2010.

To determine how the Proposed Actions may affect urban design relative to the No-Action conditions, the assessment describes the proposed project in terms of how it would affect the area's defining elements of urban design.

The Projected Development Site is located in the Far Rockaway district of Queens. The Wave Crest neighborhood of Far Rockaway is the specific district the Affected Area is located in. This neighborhood is experiencing residential development pressures. According to the NYC DOB active construction database, as of December 2018, there are nine active residential construction projects in the Surrounding Area. The Affected Area contains two vacant parcels, which comprise of the Projected Development Site. Vacant and under-utilized parcels are relatively common in the Surrounding Area. The presence of under-utilized and vacant parcels coupled with increased development pressure spurred by a residential apartment building boom in New York City is changing the dynamic of this neighborhood. It is evident that this neighborhood is undergoing a revitalization. The Proposed Actions would add to the changing energy in the neighborhood. In-fill development helps create more cohesive neighborhoods, safer streets and in general, it creates a strong urban fabric. Therefore, the Proposed Actions would not be out of character for the neighborhood, and would only serve to enhance it.

Conclusion

The height and bulk of the Projected Development would be in character with the surrounding buildings based on comparison and contextual consideration of the surrounding area. Thus, the Proposed Actions would have no adverse or detrimental impacts on urban design and the pedestrian realm.

2.4.2 Visual Resources

As per Chapter 10 of the *2021 CEQR Technical Manual*, a visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

As illustrated by **Figure 1-7,** there are no significant visual resources or natural features located in or around the Proposed Site, as defined by the *2021 CEQR Technical Manual*, nor are there

any visual or physical resources that connect the public realm to natural or built features of any significance. Therefore, the Proposed Actions will not have any adverse or detrimental impacts on the surrounding area. In addition, the proposed building, even with the increased height, will not block any views of consequence in the area.

Figures 2.4-1 to 2.4-3 show the Existing Conditions, No- Action Scenario, and With Action Scenario of the Projected Development Site from a pedestrian perspective.

Figure 2.4-1: Existing Conditions

Looking East on Far Rockaway Boulevard



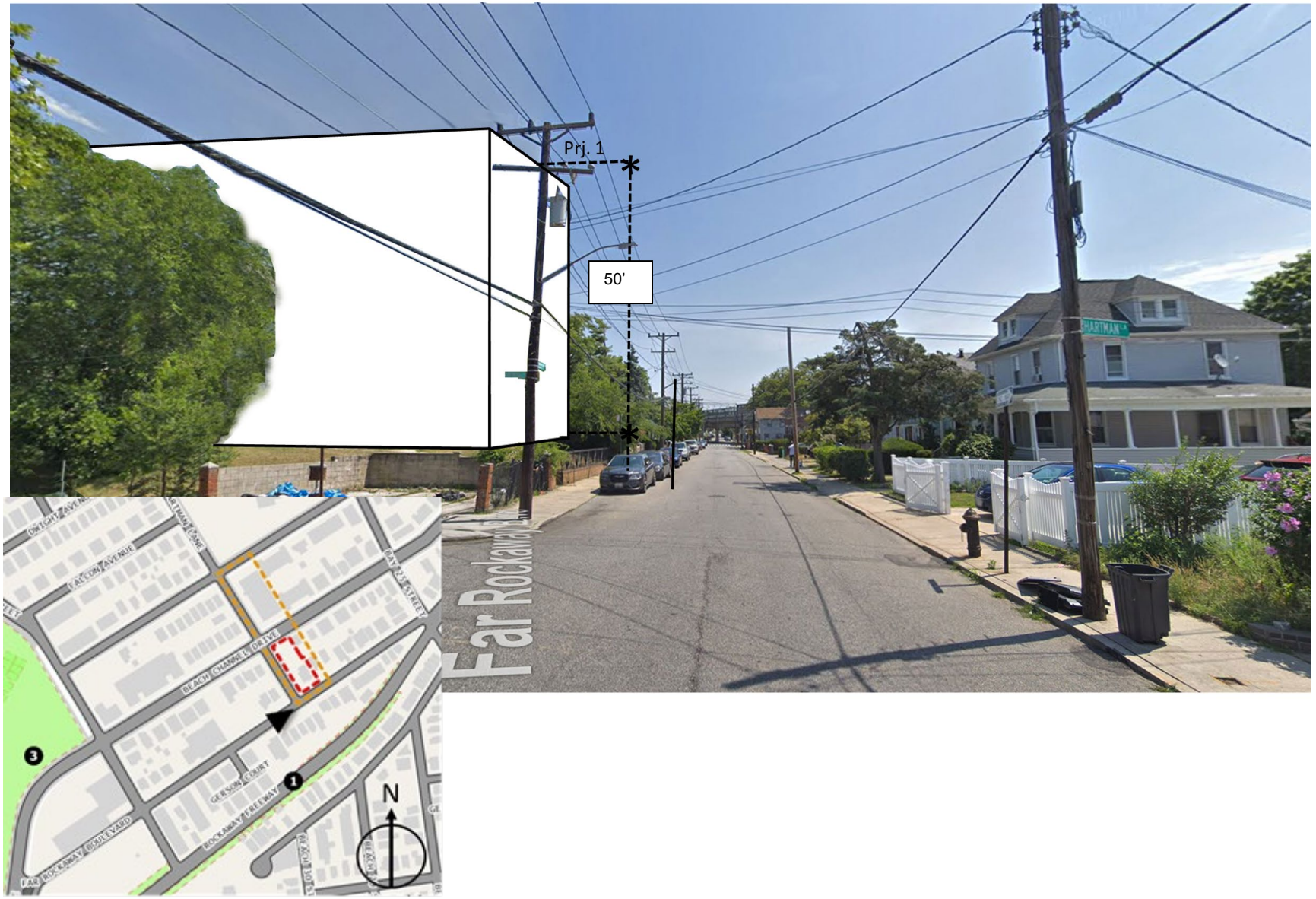
Figure 2.4-2: No Action Conditions

Illustrative Massing Looking East on Far Rockaway Boulevard



Figure 2.4-3: With-Action Conditions Illustrative Massing

Illustrative Massing Looking East on Far Rockaway Boulevard



2.5 Natural Resources

An assessment of a proposed project's impact on natural resources is typically performed for projects that either would occur on or near natural resources (e.g., wetlands, woodlands, meadows, etc.), or for projects that would result in either the direct or indirect disturbance of such resources. The proposed project site is a disturbed urban environment and no natural resource impacts are anticipated. As a result, there would be no impact to the area's natural resources and no further assessment is necessary.

The Project Area is located within the Jamaica Bay Watershed. As such, the Jamaica Bay Watershed Protection Plan Project Tracking Form was completed (see **Appendix D**). The Jamaica Bay Watershed Protection Plan, developed pursuant to Local Law 71 of 2005, mandates the New York City Department of Environmental Protection (DEP) work with the Mayor's Office of Environmental Coordination (MOEC) to review and track proposed development projects in the Jamaica Bay Watershed which are subject to CEQR, in order to monitor growth and trends.

The Projected Development Site is located approximately 1/4 mile east of an inlet of Jamaica Bay, an 18,000-acre wetland estuary surrounded by the Rockaway Peninsula to the South, Brooklyn to the West, and Queens to the East. It comprises an area almost equal to that of Manhattan and consists of numerous islands, waterways, meadowlands, and two freshwater ponds. The watershed, which covers the Affected Area, includes portions of Brooklyn, Queens, and Nassau County. The bay is a diverse ecological resource that supports multiple habitats, including open water, salt marshes, grasslands, coastal woodlands, maritime shrublands, and brackish and freshwater wetlands. These habitats support 91 fish species, 325 species of birds, and many reptiles, amphibian, and small mammal species.

The New York City Department of Environmental Protection (DEP) created a watershed protection plan focused on restoring and maintaining the water quality and ecological integrity of the Bay. The Jamaica Bay Watershed Protection Plan evaluates potential threats to the bay and coordinates environmental remediation and protection efforts in a focused and cost-effective manner for the watershed/sewershed of Jamaica Bay. The Jamaica Bay Watershed Protection Plan Project Tracking Form is provided in **Appendix D**.

The Proposed Actions would result in the redevelopment of two previously developed parcel. The Project Site is currently partially covered by building roof and asphalt paving. The Projected Development would increase the percentage of impervious lot coverage. However, the site is served by city combined sewers and would not result in an increase in direct non-point runoff into the bay or its tributaries or subsequently, increase stormwater runoff or influence drainage patterns onsite or to the surrounding area. Additionally, the Proposed Actions would not increase activities that would result in pollutant discharge from the Affected Area into Jamaica Bay. Lastly, the Proposed Actions would not eliminate any native vegetation or affect any habitat characteristics. As such, the Proposed Actions does not jeopardize the intent of the Jamaica Bay Watershed Protection Plan.

2.6 Hazardous Materials

Per the *2021 CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi- volatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). Per the *CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: a) hazardous materials exist on a site; and b) action would increase pathways to their exposure; or c) an action would introduce new activities or processes using hazardous materials.

Pursuant to *2021 CEQR Technical Manual* methodology, actions that would result in ground disturbance in an area where current or past uses on or near the site raise the potential for the presence of hazardous materials should be assessed for hazardous materials.

Methodology

The hazardous materials assessment generally begins with a Phase 1 ESA, which is a qualitative evaluation of the environmental conditions present at a site, based on a review of available information site observations, and interviews. Pursuant to the *2021 CEQR Technical Manual*, the Phase 1 ESA is conducted in accordance with the standards established by the current ASTM Phase 1 ESA Standard and includes research and field observations to determine whether the site may contain contamination from either past or present activities on the site or as a result of activities on adjacent or nearby properties. If a potential REC is identified during this assessment, then building any subsurface investigations are usually conducted as part of a Phase II ESA to confirm the presence and extent of the contamination.

Introduction

The Proposed Actions would involve the development of a four-story building containing 48 residential units with a potential community facility tenant on the first floor of the structure. The Project Site is located within a R4-1 zoning district, which would be rezoned to R6B under the Proposed Actions.

2.6.1 Summary of Phase I Environmental Site Assessment

Conditions at the project site resulting from previous and existing uses and those in surrounding areas were determined from a review of a Phase 1 Environmental Site Assessment (ESA) prepared by Equity Environmental Engineering, LLC (Equity) in May 2018. The Phase I ESA was performed pursuant to ASTM Standard E-1527-05. The purpose of this Phase I ESA is to determine whether any type of hazardous substance or petroleum product exists within or adjacent to the property in question. Environmental hazards would include, but not be limited to, hazardous/toxic wastes or raw chemicals stored, dumped, or spilled on the site,

underground and above ground storage of petroleum or hazardous materials; and identification of potential off-site sources of hazardous waste contamination, such as industrial facilities adjacent to the subject property.

The Projected Development Site consists of approximately 15,044 square feet and is located at 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive within the Wave Crest neighborhood in Far Rockaway, Queens.

Scope of Work

The Phase I ESA conducted at the Subject Property was in general accordance with ASTM Standard E 1527-13 and included the following:

- Site and vicinity reconnaissance;
- Description of current site operations;
- Historical source review and description of historical site conditions;
- Interviews with owners, operators, and/or occupants of the Site, and/or local officials, as applicable;
- Review of environmental databases and regulatory agency records;
- Review of previous environmental reports/documentation, as applicable;
- Review of environmental liens, if provided or authorized to be obtained by the user; and
- Preparation of a report summarizing findings, opinions, and conclusions

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-13 standard were made.

Standard Environmental Records Sources

Equity Environmental Engineering, LLC contracted Environmental Data Resources, Inc. (EDR) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property.

The database search is a tool to identify various environmental situations and/or activities within the required radius of the subject property. Many of these databases will only acknowledge the presence of a specific item on a property such as an underground storage tank or a dry cleaner. They do not determine the potential impact to the to the subject property and cannot consider natural and man-made impediments that would limit or prevent the

migration of contaminants from on site to another. Other databases provide sufficient knowledge to determine if there was an incident and what the severity of that incident was. For example, the majority of items within the LTANKS (leaking tanks) and/or HIST LTANKS (historic leaking tanks) deal with tank test failure's that have de minimus releases or small enough quantity releases that are addressed by the owner/operator and do not migrate beyond the location of the tank.

Findings of the Phase I ESA

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release, or a material threat of a release into structures on the property or into the ground, groundwater or surface waters of the property. Historic RECs (HRECs) are RECs previously remediated to government standards. Controlled RECs (CRECs) are RECs in which some form or institutional or engineering control has been implemented to contain the REC. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. A Vapor Encroachment Condition (VEC) is the presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property. All RECs and VECs are discussed below. The Phase I ESA has revealed the following environmental conditions:

- **RECs** - Equity found no RECs associated with the property.
- **HRECs** - Equity found no HRECs associated with the property.
- **CRECs** - Equity found no CRECs associated with the property.
- **VECs** - The EDR Vapor Encroachment database identified six VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are not closed and are related to pole transformers and leaking heating oil tanks. Based on these findings, a possible vapor encroachment cannot be ruled out.

Conclusion

Based on the findings of the Phase I ESA a VEC could not be ruled out. Because buildings exist on the Projected Development Site and would have to be demolished before site sampling can take place, The Applicant must wait for construction loans before moving forward with demolition and sampling. For these reasons, The Applicant has elected to place an E-Designation on their site:

E-Designation

The text for the (E) designation related to hazardous materials is as follows:

E-676: Block 15785, Lots 55 and 4

Task 1-Sampling Protocol

The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum-based contamination and non-petroleum-based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

2.7 Air Quality

Introduction

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis framework, as mandated by the State Environmental Review Act, follows the *New York City Environmental Quality Review 2021 Technical Manual.* Per the *CEQR Technical Manual*, the potential for significant adverse air quality impacts are predicted for the following emission sources:

- Vehicular emission resulting from increased vehicular traffic and/or changes to traffic pattern.
- Vehicular emission associated with off-street parking facilities.
- Vehicular emission generated at an atypical (*e.g.*, not at-grade) roadway.
- Emission from the burning of fossil fuels in the heating, ventilation and air conditioning (HVAC) equipment of the proposed developments.
- Air toxics emission released from industrial or manufacturing facilities.
- Stationary source emission of facilities that require Prevention of Significant Deterioration permits (Title V), and facilities which require a state facility permit.
- Facilities' malodorous emissions to unreasonably interfere with the proposed project's occupant's comfortable enjoyment of life or their property.

The Proposed Actions would facilitate the development Block 15785, Lots 4 and 55 (the 'Projected Development Site') with a 5-story plus cellar residential building, containing approximately 41,107 GSF with 48 dwelling units. Additionally, 20 enclosed parking spaces would be provided at cellar level. The building would be 50 feet in height.

2.7.1 Mobile Sources

According to the *CEQR Technical Manual*, projects, whether site-specific or generic, may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic; create any other mobile sources of pollutants (such as diesel trains, helicopters etc.); or add new uses near mobile sources (roadways, garages, parking lots, etc.). Projects requiring further assessment include:

- *Projects that would result in the placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants;*

- *Projects that would result in the creation of a fully or partially covered roadway, would exacerbate traffic conditions on such a roadway or would add new uses near such a roadway;*
- *Projects that would generate peak hour auto traffic or divert existing peak hour traffic of 170 or more auto trips in this area of the City;*
- *Projects that would generate peak hour heavy-duty diesel vehicle traffic or its equivalent in vehicular emissions resulting from 12 or more heavy-duty diesel vehicles (HDDVs) for paved roads with average daily traffic of fewer than 5,000 vehicles, 19 or more HDDVs for collector roads, 23 or more HDDVs for principal and minor arterials, or 23 or more HDDVs for expressways and limited-access roads;*
- *Projects that would result in new sensitive uses (e.g., schools or hospitals) adjacent to large existing parking facilities or parking garage exhaust vents;*
- *Projects that would result in parking facilities or applications requesting the grant of a special permit or authorization for parking facilities; or projects that would result in a sizable number of other mobile sources of pollution (e.g., a heliport or a new railroad terminal); and/or*
- *Projects that would substantially increase the vehicle miles traveled in a large area.*

The Proposed Actions would not result in operable windows or air intakes within 200 feet of an atypical roadway. It would not result in the creation of a covered roadway or affect any covered roadway. Peak hour trip generation is far below the 170-car threshold identified in Section 17-210 of the *2021 CEQR Technical Manual* as potentially warranting further assessment. The project would not generate diesel traffic. The project would not create a new sensitive receptor adjacent to large parking facilities. The project would not result in the creation of a new parking facility. The project would not result in any other mobile sources of pollution and would not significantly increase vehicle miles traveled in a large area.

Mobile Source Project-Generated Traffic Screen

Per the *2021 CEQR Technical Manual*, localized increases in CO and PM2.5 levels may result from increased vehicular traffic volumes and changed traffic patterns in the Study Area as a consequence of the proposed project. Screening analyses for CO and PM2.5 were therefore carried out to determine whether project - generated traffic has the potential to cause significant impact. For purposes of the screening assessment, “project-generated traffic” refers to the number of additional vehicular trips in any given hour under future with-action conditions, compared with the number under future no-action conditions.

CO Screening

The threshold for detailed CO impact analysis in this area of the city is 170 vehicles per hour per intersection. The estimated peak hour trip generation from the residential uses is 12 per-hour. The vehicular trip-ends effectuated by the proposed action fall below the CO screening threshold of 170 vehicles per-hour, per intersection during all peak hours of analysis.

PM2.5 Screening

A detailed analysis for PM2.5 is required if the vehicle trips generated during peak hours is equivalent to 12 HDDV on a paved road. Using the CEQR Technical Manual Section 210 and the provided truck equivalent calculator, the 12 generated trips for passenger vehicles is equivalent to 6 HDDV. This is below the 12 HDDV threshold, therefore a detailed PM2.5 analysis is not required.

2.7.2 Stationary Sources

According to the *2021 CEQR Technical Manual*, projects may result in stationary source air quality impacts when one or more of the following occurs:

- *New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, and other large institutional uses);*
- *Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use;*
- *Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected;*
- *Fossil fuels (fuel oil or natural gas) for heating/hot water, ventilation, and air conditioning systems are used;*
- *Large emission sources are created (e.g., solid waste or medical-waste incinerators, cogeneration facilities, asphalt/concrete plants, or power-generating plants, etc.);*
- *New sensitive uses are located near a large emission source;*
- *Medical, chemical or research labs are created or result in new uses being located near them;*
- *Operation of manufacturing or processing facilities is created;*
- *New sensitive uses created within 400 feet of manufacturing or processing facilities;*
- *New uses created within 400 feet of a stack associated with commercial, institutional, or residential developments (and the height of the new structures would be similar to or greater than the height of the emission stack);*
- *Potentially significant odors are created;*
- *New uses near an odor-producing facility are created;*
- *"Non-point" sources that could result in fugitive dust are created;*
- *New uses near nonpoint sources are created; and/or*
- *A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a station*

HVAC Analysis

Impacts from boiler emissions at Projected Development Sites are a function of fuel oil type, stack height, minimum distance from the source to the nearest building, and square footage of the development. Per the project sponsor, the existing building utilizes natural gas.

Additionally, an HVAC Design Plan was designed by the architect, so details about the HVAC system are provided in the plans.

A survey of the land use map indicates the closest building of equal or greater height (that could be affected by the proposed developments source of emissions) is the Challenge Prep school building, located across Beach Channel Drive approximately 100 feet northwest of the Projected Development Site. Therefore, the nearest operable window of equal or greater height from the proposed HVAC stack location is approximately 100 feet. An Air Quality Screening based on this information is shown below in **Figure 2.7-1.**

Screening Analysis

A screening analysis was performed, using the methodology described in the *CEQR Technical Manual*, to determine if the heat and hot water system of the proposed building would result in potential air quality impacts to another building in the area. This methodology determines the threshold of development size below which the action would not have a significant impact.

As outlined in the *CEQR Technical Manual,* the potential for stationary source emissions from heat and hot water systems to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used, the building's residential or non-residential use, the square footage of the development that would be served by the system, the height of the building served by the HVAC system and the distance to the nearest building whose height is at least as great as the building served by the HVAC system. The *CEQR Technical Manual* provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the projected buildings' HVAC systems.

If the actual distance between a stack and the affected building is greater than the threshold distance for a building size, than that building passes the screening analysis (and no significant impact is predicted). However, if the actual distance is less than the threshold distance for a building, then there is a potential for a significant impact and a detailed analysis would be required.

The anticipated development within the proposed Rezoning Area would consist of just one building equipped with its own heat and hot water system. It is assumed that the use of Fuel Oil #2 is the worst-case scenario as no new boiler permits will be issued to boilers using any fuel oil other than Fuel Oil #2 in accordance with 15 RCNY 2-15.

As previously mentioned, the screening analysis is only applicable to a single smokestack, and this CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. The project-on-existing screening analysis considered the impact of the proposed project assuming residential occupancy, building height of 50 feet including a 3-foot HVAC stack, and 41,107 GSF of floor area.

The CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendix* for a 30-foot stack height was applied as the 30 feet curve height is closest to but not higher than the proposed stack height of the projected building. The Stationary Source Screen Figure 17-5 referenced in the *Appendices* of the *CEQR Technical manual* is a generic screen assuming the HVAC system is fueled by Fuel Oil #2.

Figure 2.7-1: The Proposed Project - HVAC Screen Fuel Oil #2 Nomograph

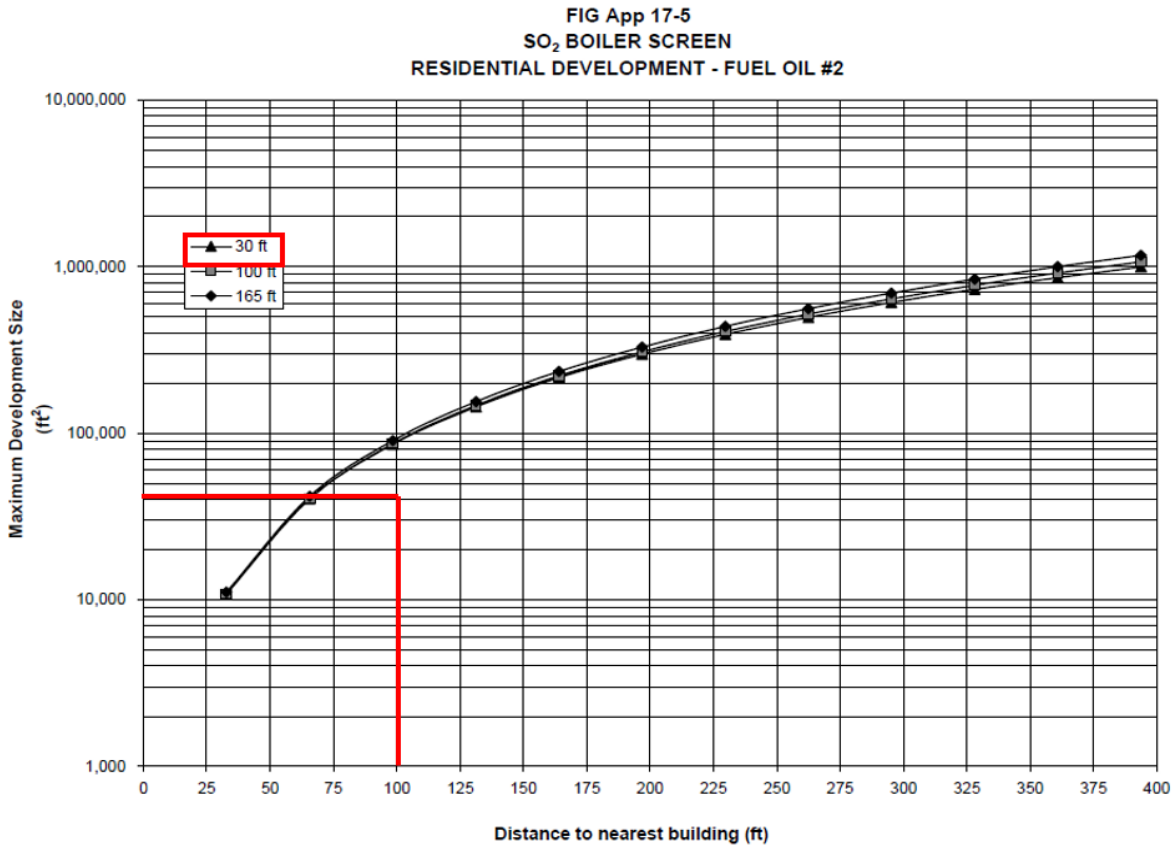


Figure 2.7-1 screening analysis shows that a detailed analysis would be required for any existing or planned land uses that are 50 feet or higher and at a distance of less than 65 feet from the proposed project. A review of existing land uses shows that the nearest building of similar or greater height is the Challenge Prep school building, located within the Affected Area across Beach Channel Drive from the Projected Development Site. The distance from the school building to the Projected Development Site is approximately 100 feet. Therefore, a detailed analysis was not required.

The following E-Designation will be placed on the Projected Development Site:

E-676

Block 15785, Lots 4 and 55: Any new residential development on the above-referenced property must ensure the heating, ventilating and air conditioning (HVAC) systems and hot water equipment stack is located at the highest tier and at least 50 feet above grade to avoid any potential significant adverse air quality impacts.

Industrial Emission Analysis

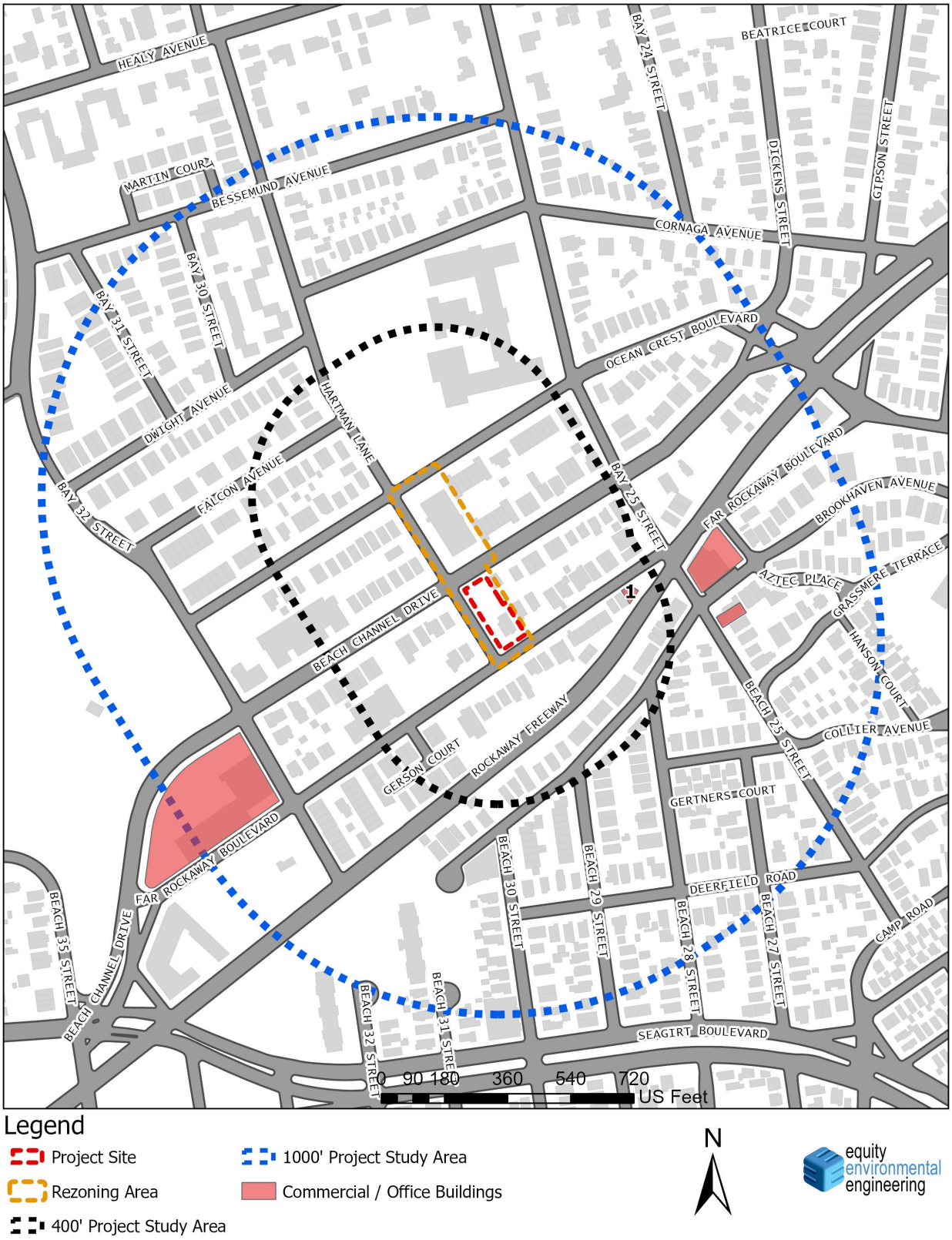
As outlined in the *2021 CEQR Technical Manual*, projects that would introduce new uses near industrial sources may result in potentially significant adverse air quality impacts. The Study Area considers industrial sources within 400 feet of the proposed project. Here, industrial sources are potential toxic air emitter based on the facility type of manufacturing process. The analysis first determines if there are any existing industrial sources located in the Study Area. An air dispersion analysis is then performed for any existing industrial source that is in the Study Area, otherwise no analysis is required.

Figure 2.7-2 shows the Project Site and the 400 foot Study Area. A review of ZoLa and the PLUTO database showed no industrial land uses within the Study Area. A review of the CATS database showed there were no active industrial related permits are registered in the search area.

A search of Google Street View was conducted to confirm the actual uses operating at the below surrounding properties as well as to identify any potential non-permitted activities in the Study Area that could result in industrial process emissions. No facilities were identified that could result in potential non-permitted industrial emissions. Therefore, there is no potential for impact from industrial source emissions on the Proposed Development.

Figure 2.7-2 shows the Project Site and the 1,000 foot large source Study Area. A review of ZoLa and the PLUTO database showed no industrial land uses within the Study Area. A review of the NYSDEC Info Locater showed there were no large or major source industrial permits in the Study Area. Therefore, there is no potential for impact from large or major source industrial source emissions on the Proposed Development.

Figure 2.7-2: 400-foot and 1,000-foot Industrial Source and Large Source Screening Area



2.8 Noise

Introduction

Noise Monitoring was conducted by Equity Environmental Engineering, LLC (equity) personnel to support the proposal for a residential building located at 25-46 Far Rockaway Boulevard, Queens, NY (Block 15785, Lots 4 and 55). Vehicular traffic and a raised railway are the sources of noise in this area. Therefore, the proposed development warrants an assessment of the potential for adverse effects on the occupants from ambient noise. The proposed development would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. This noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development.

Methodology

Noise is defined as any unwanted sound, and sound is defined as any air pressure variation that the human ear can detect. Human beings can detect a large range of sound pressures ranging from 20 to 20 million micropascals, but only those air-pressure variations occurring within a set of frequencies are experienced as sound. Air-pressure changes that occur between 20 and 20,000 times a second, stated as units of Hertz (Hz), are registered as sound.

In terms of hearing, humans are less sensitive to low frequencies (<250 Hz) than mid-frequencies (500-1,000 Hz). Humans are most sensitive to frequencies in the 1,000 to 5,000 Hz range. Since ambient noise contains many different frequencies all mixed together, measures of human response to noise assign more weight to frequencies in this range. This is known as the A- weighted sound level.

Noise is measured in sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the A-weighted scale are termed “dB(A).” The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB(A), and the threshold of pain is about 140 dB(A).

Because the scale is logarithmic, a relative increase of 10 decibels represents a sound pressure level that is 10 times higher. However, humans do not perceive a 10 dB(A) increase as 10 times louder; they perceive it as twice as loud. The following are typical human perceptions of dB(A) relative to changes in noise level:

- 3 dB(A) change is the threshold of change detectable by the human ear;
- 5 dB(A) change is readily noticeable; and
- 10 dB(A) increase is perceived as a doubling of the noise level.

The SPL that humans experience typically varies from moment to moment. Therefore, various descriptors are used to evaluate noise levels over time. Some typical descriptors are defined below.

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity, level.

High noise levels during a measurement period will have a greater effect on the L_{eq} than low noise levels. L_{eq} has an advantage over other descriptors because L_{eq} values from various noise sources can be added and subtracted to determine cumulative noise levels.

- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (L_X). Examples include L_{10}, L_{50}, and L_{90}. L_{10} is the A-weighted sound level that is exceeded 10% of the measurement period.

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law (i.e., the SPL changes in inverse proportion to the square of the distance from the sound source). In a large open area with no obstructive or reflective surfaces, it is a general rule that at distances greater than 50 feet, the SPL from a point source of noise drops off at a rate of 6 dB with each doubling of distance away from the source. For "line" sources, such as vehicles on a street, the SPL drops off at a rate of 3 dBA with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate also will vary with both terrain conditions and the presence of obstructions in the sound propagation path.

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEPO-CEQR) noise standards at the exterior façade to achieve interior L_{10} noise levels 45 dBA or below and interior L_{dn} noise levels 40 dBA or below depending on the noise sources. CEPO- CEQR Noise Standards classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable. As noted in the *2021 CEQR Technical Manual*, these standards are the basis for classifying noise exposure into the following categories based on the L_{10} and L_{dn} noise levels outside the projected development site:

Table 2.8-1: Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	70 < L10 ≤ 73	73 < L10 ≤ 76	76 < L10 ≤ 78	78 < L10 ≤ 80	80 < L10
Aircraft[A]	65 < DNL ≤ 68	68 < DNL ≤ 71	71 < DNL ≤ 73	73 < DNL ≤ 75	75 < DNL
Train	65 < Ldn ≤ 68	68 < Ldn ≤ 71	71 < Ldn ≤ 73	73 < Ldn ≤ 75	75 < Ldn
Attenuation[B]	(i) 28 dB(A)	(ii) 31 dB(A)	(iii) 33 dB(A)	(iv) 35 dB(A)	See Note c

Note:

A. DNL descriptor based on average values of Ldn over a year period.
B. The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All of the above categories require a closed window situation and hence an alternate means of ventilation.
C. The required attenuation value is the difference between Lbuild and Linterior, using the appropriate noise descriptor Where:
Lbuild is the projected noise level under the build condition rounded up to the whole number
Linterior is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)

2.8.1 Mobile Sources

Mobile noise sources are those which move in relation to receptors. The mobile source screening analysis addresses potential noise impacts associated with vehicular traffic and a raised railway generated by the Proposed Actions.

Per the *2021 CEQR Technical Manual*, if existing passenger car equivalent (PCE) values are increased by 100 percent or more due to a Proposed Actions, a detailed analysis is generally performed. No significant adverse mobile source noise impacts due to vehicular traffic are anticipated because of the Proposed Actions as It does not increase existing passenger equivalent values by more than 100 percent.

2.8.2 Stationary Sources

The *2021 CEQR Technical Manual* states that based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there are no structures that provide shielding), it is unusual for stationary sources to have significant impacts at distances beyond 1,500 feet. A detailed analysis may be appropriate if the proposed project would: cause a substantial stationary source (i.e., unenclosed mechanical equipment for manufacturing or building ventilation purposes, playground, etc.) to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed

manufacturing activities or other loud uses. Machinery, mechanical equipment, heating, ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor, and is unenclosed. No unenclosed specific stationary noise sources of concern were observed during field inspection. As the project site is not subject to high ambient noise levels from any nearby stationary source, no stationary source noise impacts from surrounding uses are anticipated. It is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building mechanical equipment. As the proposed project would not introduce a new stationary noise source, no significant adverse stationary source impacts are anticipated because of the Proposed Actions, and no further analysis is warranted.

Measurement Location and Equipment

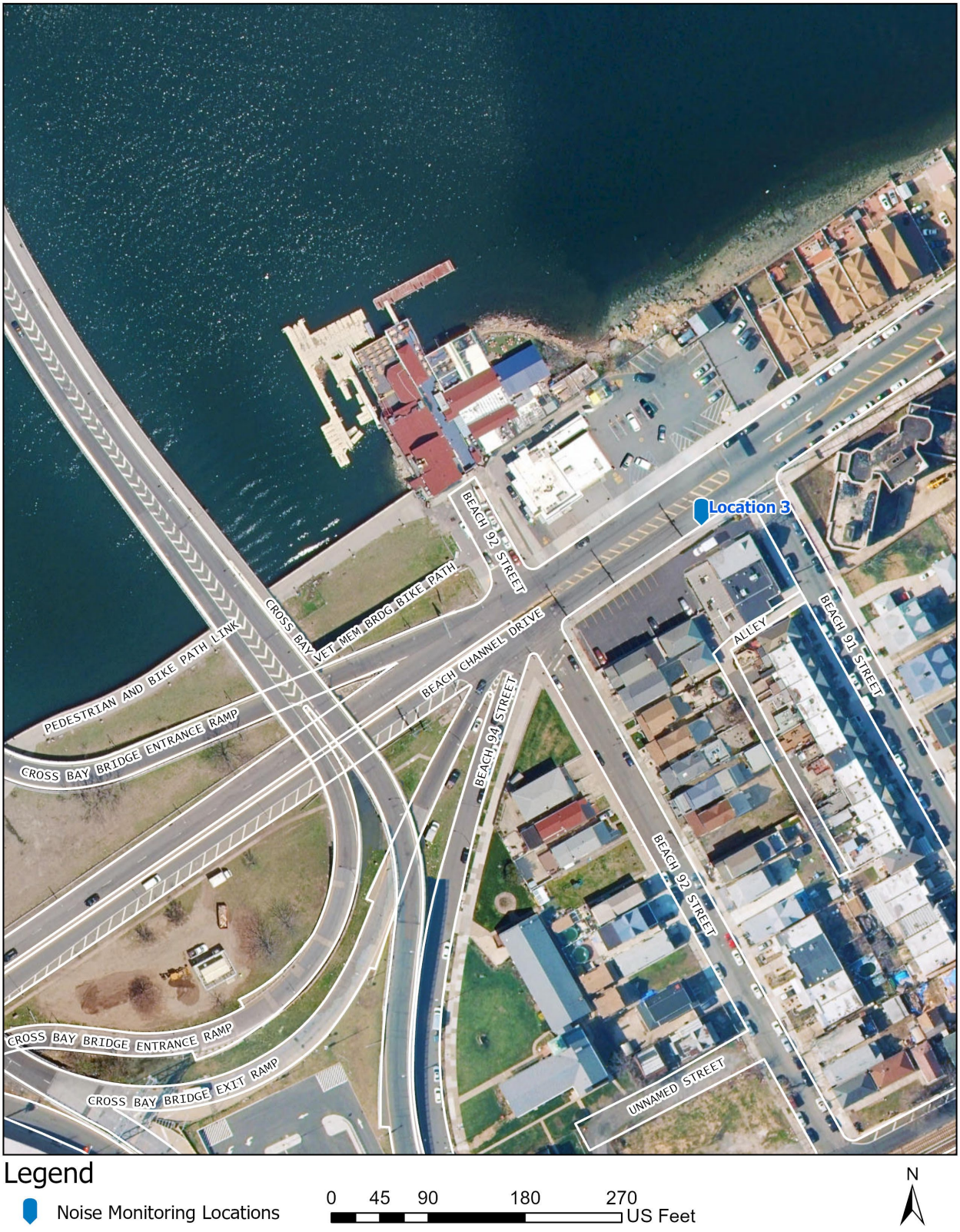
Because the noise sources in the area of the proposed project are vehicular and elevated train movements, noise monitoring was conducted during peak vehicular travel periods, 07:30 am-09:00 am, 12:00 pm-1:30 pm, and 4:30 pm-6:00 pm. There would be a direct line of site from upper floors of the Projected Development to the elevated A train tracks over Rockaway Freeway approximately 250 feet to the south. In order to document potential effects of train noise on building residents, noise monitoring was conducted at a location on the platform of the nearby Beach 25th Street station (Location 2) (approximately 500’ from the Project Site) as well as at a street level location in front of the Projected Development Site (Location 1). An additional noise monitoring location (Location 3) was collected. Considering the measured peak hour train noise levels at Monitoring Location 2 and distance between train source and Project Site, train noise would have minimal impact at the Project Site and, therefore, would not be considered dominant noise source at the Project Site. Due to the COVID-19 pandemic and the DOT moratorium on traffic-related measurements, Location 3 noise monitoring data was utilized from a previous project that Equity completed (91-05 Beach Channel Drive Rezoning CEQR# 18DCP181Q). Location 3 is located at the intersection of Beach Channel Drive and Beach 91st Street. This location is comparable to the intersection of Beach Channel Drive and Hartman Lane, where the reading will be applied. This Location was known as Location 2 from the original project it was taken from.

Readings on all frontages were conducted for periods of 1-hour during three peak periods of vehicular travel. Noise monitoring was conducted using a Type 1 Casella CEL-633 sound meter with wind screen. The monitor was placed on a tripod at a height of approximately five feet above the ground, away from any other noise-reflective surfaces. The monitor was calibrated prior to and following each monitoring session. Periods of peak vehicular around the subject site constitute a worst-case condition for noise at the project site. Noise monitoring locations are shown below in **Figure 2.8-1 and 2.8-2.**

Figure 2.8-1: Noise Monitoring Locations 1 & 2



Figure 2.8-2: Noise Monitoring Location 3



Location 1: *Far Rockaway Boulevard in front of Projected Development Site*



Location 2: *Elevated Subway Platform*



Location 3: *Beach Channel Drive and Beach 91st Street*



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Thursday, October 25, 2018 and Wednesday, October 3rd, 2018. The weather was approximately 45^0-55^0 Fahrenheit and wind speeds were mild during monitoring. Traffic volumes and vehicle classification were documented during the noise monitoring.

Existing Conditions

Based on the noise measurements taken at the Projected Development Site, the source of noise at the site is vehicular traffic and elevated train movements. The volume of traffic, and its corresponding level of noise is moderate at Location One (1). The volume of trains, and its corresponding level of noise is moderate at Location Two (2). The volume of traffic, and its corresponding level of noise is moderate at Location Three (3).

Table 2.8-2 to Table 2.8-4 *below contains the results for the measurements taken at the subject site:*

Table 2.8-2

Location 1: *Noise Levels (dB) at 25-46 Far Rockaway Boulevard*

Thursday, October 25, 2018			
Time	07:43 am – 08:43 am	12:00 pm– 01:00 pm	4:30 pm – 5:31 pm
L_{max}	100.5	89.9	83.1
L_{10}	61.0	62.5	59.5
L_{eq}	64.8	59.8	57.6
L_{50}	53.5	52.5	51.5
L_{90}	49.5	47.0	47.0
L_{min}	43.2	40.0	41.8

Table 2.8-3

Location 2: *Noise Levels (dB) at Far Rockaway Boulevard Raised Railway*

Thursday, October 25, 2018			
Time	08:07 am – 09:07 am	12:00 pm– 1:00 pm	4:30 pm – 5:30 pm
L_{max}	93.2	91.8	91.8
L_{10}	63.5	62.0	62.5
L_{eq}	69.8	69.2	**70.2**
L_{50}	56.5	53.5	54.0
L_{90}	51.0	47.5	49.5
L_{min}	46.0	42.3	44.2

Table 2.8-4

Location 3: *Noise levels (dB) at Beach Channel Drive and Beach 91st Street*

Wednesday, October 3rd, 2018			
Time	7:40 am – 8:40 am	12:03 pm – 1:03 pm	4:36 pm – 5:36 pm
L_{max}	103.7	96.1	102.9
L_{10}	**74.5**	**72.5**	**73.0**
L_{eq}	**75.1**	**70.3**	**72.3**
L_{50}	69.0	66.0	66.5
L_{90}	62.5	59.0	58.5
L_{min}	55.1	51.6	55.6

Table 2.8-5 to Table 2.8-7 *below contains the traffic volumes (vehicle counts) and vehicle classifications for the morning, noon, and evening monitoring sessions:*

Table 2.8-5
Morning Traffic Volumes and Vehicle Classifications

	Location 1	Location 2	Location 3
Car/ Taxi	26	N/A	506
Van/Light Truck/SUV	35	N/A	792
Heavy Truck	2	N/A	59
Bus	1	N/A	73
Train	8	8	0

Table 2.8-6
Mid-Day Traffic Volumes and Vehicle Classifications

	Location 1	Location 2	Location 3
Car/ Taxi	16	N/A	421
Van/Light Truck/SUV	23	N/A	629
Heavy Truck	3	N/A	38
Bus	1	N/A	40
Train	7	7	0

Table 2.8-7
Evening Traffic Volumes and Vehicle Classifications

	Location 1	Location 2	Location 3
Car/ Taxi	14	N/A	494
Van/Light Truck/SUV	33	N/A	750
Heavy Truck	0	N/A	47
Bus	1	N/A	61
Train	8	8	0

Conclusion

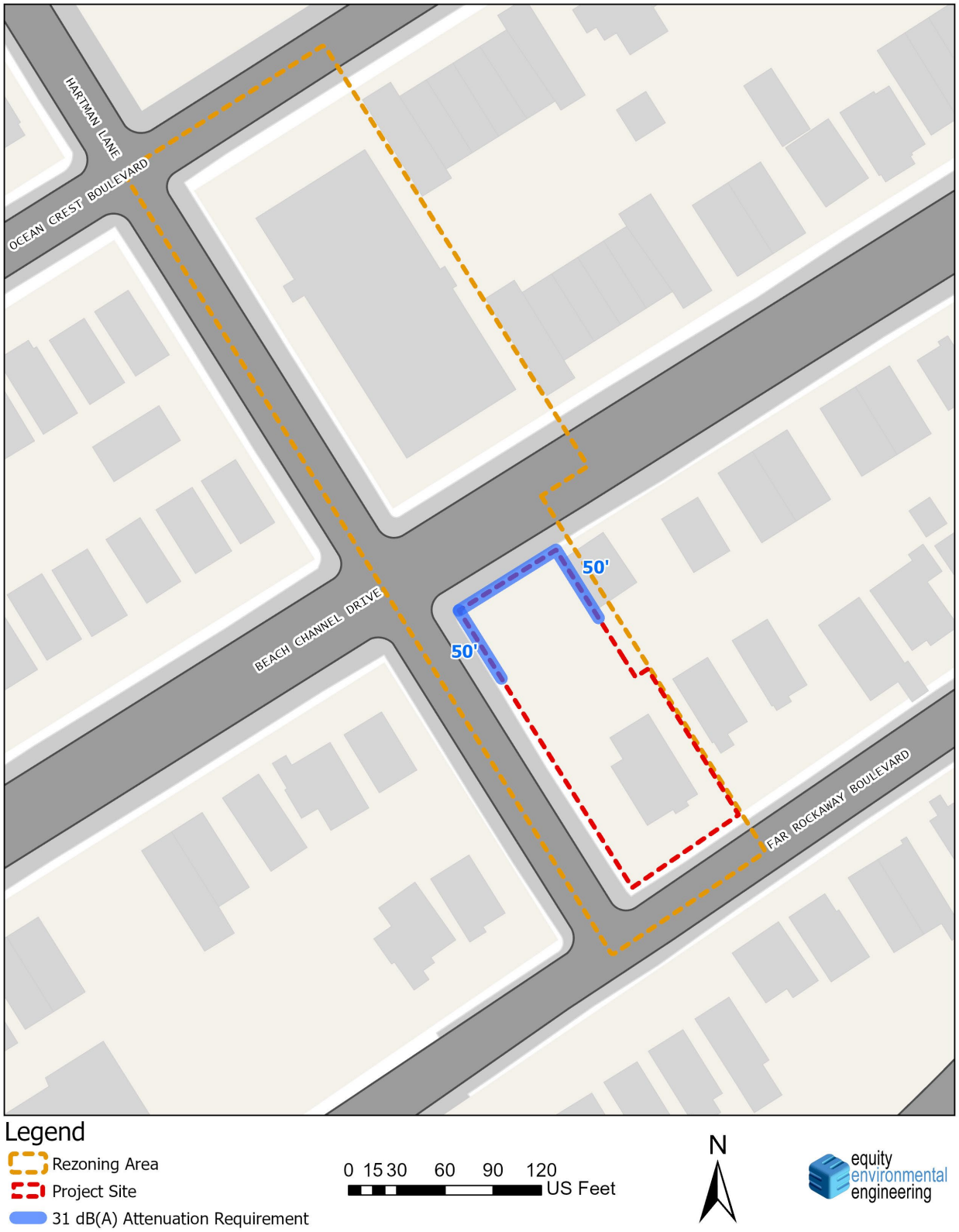
The *2021 CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the Proposed Actions, an L_{10} or L_{eq} of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L_{10} or L_{eq} of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure. The highest recorded L_{10} or L_{eq} at Location 1 was 64.8 during the morning monitoring period and the highest recorded L_{10} or L_{eq} at Location Two (2) on the elevated subway platform and was 70.2 dB(A) during the evening period. However, the elevated train over Rockaway Freeway is approximately 250 feet away from the Project Site, and, based on a doubling of distance resulting in 3 dB(A) reduction, noise related to the rail line at the Project Site would be minimal (i.e., highest peak hour Leq or L10 is projected to be mid- to high-50 dBA at the Project Site) and would not be considered dominant noise source at the Project Site. Therefore, noise related to the rail line will not negatively impact the Project Site. The highest recorded L_{10} or L_{eq} at Location 3 was 75.1 during the morning monitoring period. Based on these results, a 31 dB(A) window-wall attenuation will be required for all facades along Beach Channel Drive and a 50' wrap around on eastern and western facades from Beach Channel Drive. No other facades require window-wall attenuation. With this level of attenuation, there would not be potential for adverse impacts related to noise.

In order to ensure the site will not have the potential for a significantly adverse impact related to noise, the following E-Designation will be put in place:

E-676:

Block 15785, Lots 4 and 55: To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on the facades facing Beach Channel Drive and the facades facing Hartman Lane within 50 feet of Beach Channel Drive and the facades facing Beach 25th Street within 50 feet of Beach Channel Drive to maintain an interior noise level not greater than 45 dBA for residential uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Figure 2.8-3: Attenuation Requirements Diagram



2.9 Construction

According to the *2021 CEQR Technical Manual,* Construction impacts may be analyzed for any project that involves construction or could induce construction. For construction activities not related to in-ground disturbance, short-term construction generally does not warrant a detailed construction analysis. Consideration of several factors, including the location and setting of the project in relation to other uses and intensity of construction activities are used to determine if a project's construction activities warrant analysis in one or more of the following technical areas:

- Transportation
- Air Quality or Noise
- Historic and Cultural Resources
- Hazardous Materials
- Natural Resources
- Open Space
- Socioeconomic Conditions
- Community Facilities
- Land Use and Public Policy
- Neighborhood Character
- Infrastructure

A preliminary assessment is generally not needed for these technical areas unless:

- Construction activities are considered long-term (Last longer than two years); or.
- Short term construction activities would directly affect a technical area, such as impeding the operation.
- Result in the closing, narrowing, impeding of traffic, transit, or obstruction of pedestrian or vehicular routes in proximity to critical land uses.
- Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out.
- The operation of several pieces of diesel equipment in a single location at peak construction.
- Closure of a community facility or disruption in its services.
- Disturbance of a site containing or adjacent to a site containing natural resources.
- Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall.

Conclusion

All construction activities would be completed within 18 months in a single-phase and would be performed subject to relevant NYC Department of Transportation ("DOT") and Department of Buildings ("DOB") regulations to ensure minimal construction-related impacts.

APPENDIX A

PROPOSED ARCHITECTURAL PLANS

DESIGN PROFESSIONAL OF RECORD

JACKMAN J. PRESCOD, P.E.
303 MERRICK RD - SUITE 402
LYNBROOK, NY 11563
TEL: 516-561-5454
EMAIL: JPRESCOD@5-TH-DIM.COM

PROPOSED 5 STORY RESIDENTIAL BUILDING HARTMAN LANE, FAR ROCKAWAY QUEENS, NY , 11691

DESIGN PROFESSIONAL

JACKMAN J. PRESCOD, P.E.
303 MERRICK RD, SUITE 402
(631) 561-5454
LYNBROOK, NY 11563
JPRESCOD@5-TH-DIM.COM

SUBJECT LOCATION:
HARTMAN LANE, FAR ROCKAWAY
QUEENS, NY 11691



SITE LOCATION MAP
SCALE: N/A

SUBJECT LOCATION:
HARTMAN LANE, FAR ROCKAWAY
QUEENS, NY 11691



TAX MAP
SCALE: N/A

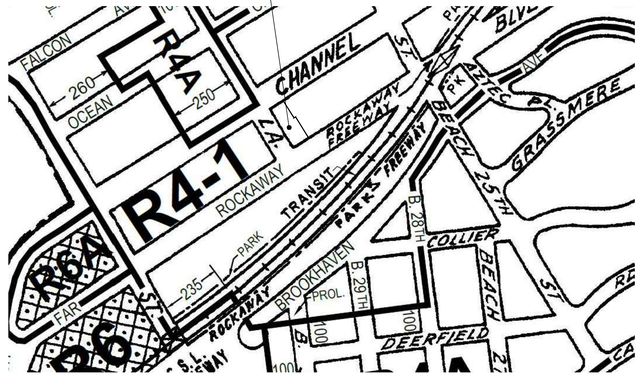


EXISTING STREET VIEW
SCALE: N/A



PROPOSED RESIDENTIAL BUILDING
SCALE: N/A

SUBJECT LOCATION:
MAP # 31A
ZONING: R4-1



ZONING MAP : 31A
ZONING: R4-1

DRAWING LIST

T-000	-	COVER SHEET
X-100	-	OLD SURVEY MAP
Z-100	-	PROPOSED ARCHITECTURAL PLOT PLAN
Z-101	-	ZONING DEDUCTIONS
Z-102	-	ZONING ANALYSIS
Z-103	-	FEMA FLOOD MAP
Z-104	-	FLOOD HAZARD ZONES & FLOOD ELEVATIONS
Z-105	-	FLOOD ELEVATION - SECTIONS
Z-106	-	FLOOD PROTECTION SYSTEMS
Z-107	-	FLOOD PROTECTION STRATEGIES
Z-108	-	FLOOD PROTECTION STRATEGIES
Z-109	-	FLOOD PROTECTION STRATEGIES
A-100	-	PROPOSED CELLAR - PARKING GARAGE
A-101	-	PROPOSED FIRST FLOOR- APARTMENTS PLANS
A-102	-	PROPOSED SECOND FLOOR- APARTMENTS PLANS
A-103	-	PROPOSED 3RD TO 5TH FLRS. - APARTMENTS PLANS
A-104	-	PROPOSED ROOF FLOOR
A-105	-	PROPOSED ROOF PLAN
A-200	-	FRONT ELEVATION
A-201	-	REAR ELEVATION
A-202	-	LEFT AND RIGHT ELEVATIONS
A-300	-	PROPOSED SECTION A-A
A-301	-	PROPOSED SECTION B-B
A-400	-	SPLAY CURB CUT DETAIL

SCOPE OF WORK

PROPOSED 5 STORY RESIDENTIAL BUILDING

5d ARCHITECTURE & ENGINEERING,PLLC
www.5th-dim.com
270 SPAGNOLI ROAD -SUITE 200 MELVILLE, NY 11747
(631)561-5454

BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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JOB NUMBER **5D21xxx**

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O.H.=OVERHANG, HE.=HEDGE, T.C.=TOP CURB ELEVATION, L.G.=LEGAL GRADE, G=GUTTER ELEVATION, M.H.W=MEAN HIGH WATER, EL=ELEVATION, IRR=IRREGULAR, TITLE NO.

O.H.=OVERHANG, HE.=HEDGE, T.C.=TOP CURB ELEVATION, L.G.=LEGAL GRADE, G=GUTTER ELEVATION, M.H.W=MEAN HIGH WATER, EL=ELEVATION, IRR=IRREGULAR, TITLE NO.

SECTION: — BLOCK 15786 LOT 4 SCALE 1" = 15' FE=FENCE, PW=PARTY WALL, R.O.=ROOF OVER, C.E.=CELLAR ENTRANCE, RES=RESIDENCE, OL=ON LINE, E/S=EAST SIDE, N/S=NORTH SIDE, W/S=WEST SIDE, S/S=SOUTH SIDE, RET=RETAINING, BLDG=BUILDING, CL=CLEAR

BEACH CHANNEL DRIVE
DICKENS AVENUE, FRANKLIN AVENUE

FAR ROCKAWAY
ATLANTIC AVE., 60' WIDE

BEACH 29th ST.

HARTMAN LANE
B. 29TH STREET, MEADOW AVENUE

HARTMAN LANE
BEACH 29th ST, MEADOW, AV., 60' WIDE

Locations Of Facilities In Data Shown Hereon Are Approximate And Are Not Guaranteed By Our Firm.

These Data Are Accepted At The Risk Of The User

SURVEY SOLELY TO BE USED FOR BLDG. DEPT. USE ONLY NOT TO BE USED FOR MORTGAGE OR TITLE PURPOSES

QUEENS
GRADES REFER TO A DATUM 2.725 ABOVE U.S. COAST AND GEODETIC SURVEY AT SANDY HOOK

NOTE:
NO STREAMS OR WATER COURSES ON THIS PROPERTY AS SHOWN.

MAP OF PROPERTY
BLOCK
LOT AS SHOWN
LOCATION FAR ROCKAWAY, QUEENS COUNTY, NEW YORK
CERTIFIED ONLY TO

DATE 5-24-2005, 12-3-2006

NOT RESPONSIBLE FOR EASEMENTS AND SUB SURFACE CONDITIONS OTHER THAN SHOWN

ARESCO, HICKSVILLE, N.Y.-OGILVIE 092735

PLOT AREA = 6,46

AUTHORIZED SIGNATURE REQ'D
John P. Ferrantello P.E.
LICENSED LAND SURVEYOR
GARDEN CITY PARK, N.Y.
N.Y.S. LIC. NO. 45017

PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT

QUEENS
GRADES REFER TO A DATUM 2.725 ABOVE U.S. COAST AND GEODETIC SURVEY AT SANDY HOOK

MAP OF PROPERTY
BLOCK
LOT AS SHOWN
LOCATION FAR ROCKAWAY, QUEENS COUNTY, NEW YORK
CERTIFIED ONLY TO

DATE 12-3-2006

NOT RESPONSIBLE FOR EASEMENTS AND SUB SURFACE CONDITIONS OTHER THAN SHOWN

OFFSETS & DIMENSIONS SHOWN NOT TO BE USED FOR THE REMOVAL, RELOCATION OR LAYOUT OF FENCES, HEDGES, CURBS, WALLS OR ANY STRUCTURES.

PLOT AREA = 8,569.5 ±

NOTE:
NO STREAMS OR WATER COURSES ON THIS PROPERTY AS SHOWN.

AUTHORIZED SIGNATURE REQ'D
John P. Ferrantello P.E.
LICENSED LAND SURVEYOR
GARDEN CITY PARK, N.Y.
N.Y.S. LIC. NO. 45017

SVILLE, N.Y.-OGILVIE 092735

OLD SURVEY PLAN

PROPOSED

SCALE: 3/32"=1'-0"

0 3/32" 1" 2

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www.5th-dim.com
270 SPAGNOLI ROAD -SUITE 200 MELVILLE, NY 11747
(631)561-5454

BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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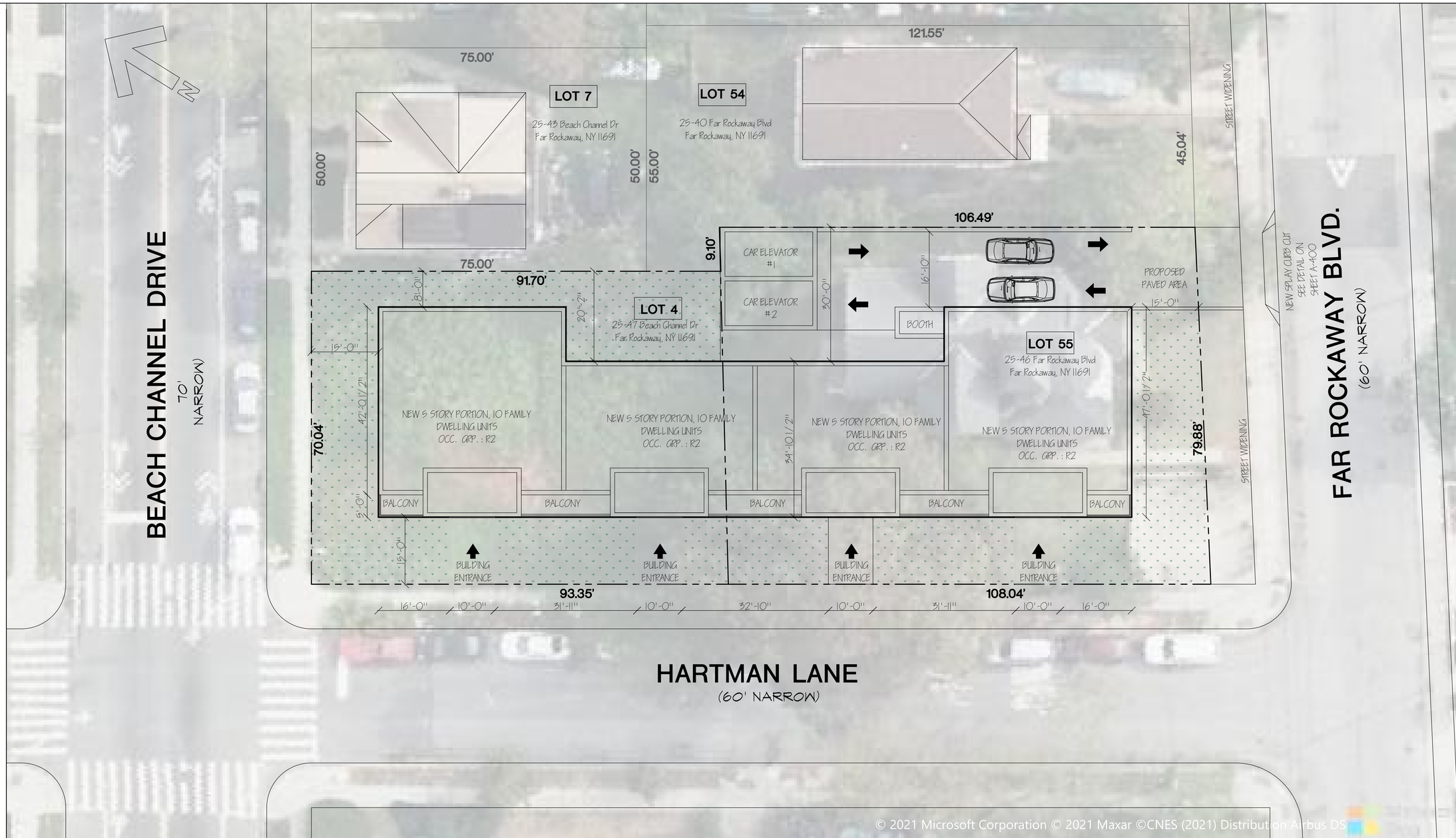

LOCATION: HARTMAN LANE & BEACH CHANNEL DRIVE, BLOCK: 15785, LOT: 4 & 55 (EXISTING) C.B.: 414, ZONING DIST.: R4-1 (**USING R6B) MAP # : 31a,

SCOPE OF WORK

PROPOSED 5 STORY RESIDENTIAL BUILDING

** USING R-6B ZONING DISTRICT: **

MAX ALLOWABLE FLOOR AREA , AS PER SECTION 23-153 Z.R

RESID.: FAR = 2.2 LOT COVERAGE= 60% CORNER LOT CORNER COVERAGE MAX. = 100%

MAX. ALLOWABLE FLOOR AREA: (LOT AREA) 15,044.00 S.F. X 2.2 = 33,096.00S.F.

MAX. ALLOWABLE LOT COVERAGE: 15,044 S.F. X 0.60= 9,026.00 S.F. CORNER LOT

TOTAL PROPOSED F.A. : 32,500.00 S.F

32,500.00 S.F. < 33,096.00 S.F., THEREFORE OK. -- PROPOSED LOT COVERAGE: 6,904.00 S.F. < 9,026.00 S.F. , THEREFORE OK.

R6B D.U. FACTOR = 680

MAX. ALLOWABLE D.U. 33,096/680 = 49 UNITS PROP. UNITS = 40 UNITS MAX FAR 2.2 PROP. AFFORDABLE UNITS = 25% X 32,500SF = 8,125 SF (10 D.U. UNITS)

MAX. BUILDING HEIGHT, AS PER SECTION 23-641, (f) Z.R.

MAX BUILDING HT. = 50 - 55FT (R6B) BASE HT. MIN-MAX. = 30 - 45FT.

PROPOSED HEIGHT: MAX. BUILDING HT. = 50FT

ARCHIT. PLOT PLAN

PROPOSED

SCALE: 3/32"=1'-0"

0 3/32" 1" 2

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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PROPOSED ARCHIT. PLOT PLAN

JOB NUMBER

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ZONING DEDUCTIONS

-ZR - 12-10: FLOOR AREA

(10) FLOOR SPACE IN EXTERIOR BALCONIES OR IN OPEN OR ROOFED TERRACES PROVIDED THAT NOT MORE THAN 67 PERCENT OF THE PERIMETER OF SUCH BALCONY OR TERRACE IS ENCLOSED,SHALL NOT CONSTITUTE AN ENCLOSURE.

BALCONIES ENCLOSED PERIMETER = 62% < 67% - **THEREFORE OK**

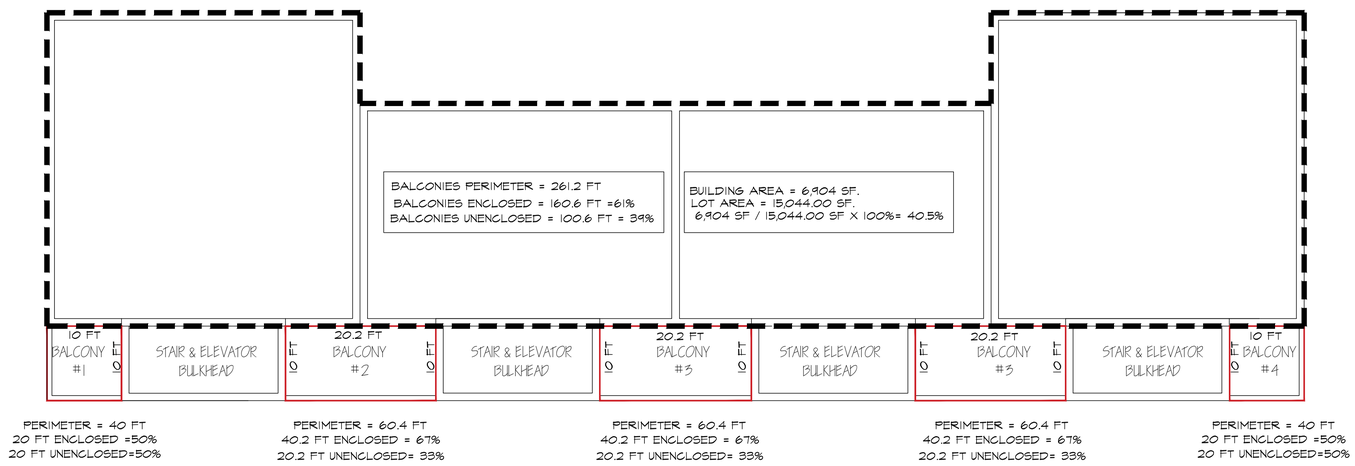
HOWEVER, THE FLOOR AREA OF A BUILDING SHALL NOT INCLUDE:

(2) ELEVATOR OR STAIR BULKHEADS, ACCESSORY WATER TANKS, OR COOLING TOWERS, EXCEPT THAT SUCH EXCLUSIONS SHALL NOT APPLY IN R2A DISTRICTS.

-ZR - 23-132:

(E) BALCONIES BE LOCATED AT OR HIGHER THAN THE FLOOR LEVEL OF THIRD STORY OF A BUILDING OR AT LEAST 20FT ABOVE CURB LEVEL, EXCEPT FOR BUILDINGS CONTAINING RESIDENCES NOT MORE THAN 32 FEET IN HEIGHT, SUCH BALCONY MAY BE LOCATED AT OR HIGHER THAN THE FLOOR LEVEL OF THE SECOND STORY PROVIDED THAT SUCH BALCONY IS LOCATED NOT LOWER THAN SEVEN FEET ABOVE CURB LEVEL OR SEVEN FEET ABOVE NATURAL GRADE, WHICHEVER IS HIGHER

BALCONIES LOCATED ON 3RD STORY - **THEREFORE OK**



-ZR-23-86: MINIMUM DISTANCE BETWEEN LEGALLY REQUIRED WINDOWS AND WALLS OR LOT LINES

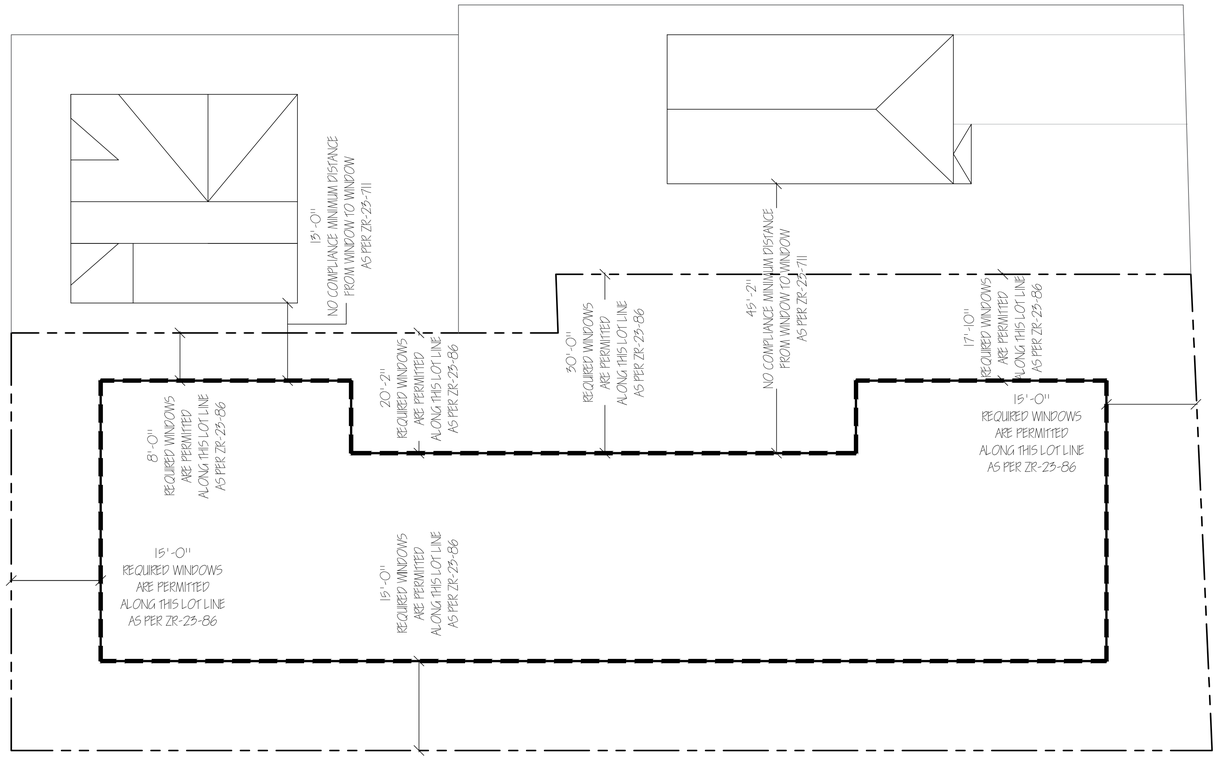
THIS SECTION SHALL NOT APPLY TO LEGALLY REQUIRED WINDOWS IN BUILDINGS CONTAINING RESIDENCES - **THEREFORE OK**

-ZR-23-711: STANDARD MINIMUM DISTANCE BETWEEN BUILDINGS

R1 R2 R3 R4 R5 R6 R7 R8 R9 R10

IN ALL DISTRICTS, AS INDICATED, THE REQUIRED MINIMUM DISTANCE BETWEEN THE PORTION OF A BUILDING CONTAINING DWELLING UNITS AND ANY OTHER BUILDING ON THE SAME ZONING LOT SHALL VARY ACCORDING TO THE HEIGHT OF SUCH BUILDINGS AND THE PRESENCE OF LEGALLY REQUIRED WINDOWS IN FACING BUILDING WALLS.
SUCH MINIMUM DISTANCE SHALL BE, IN FEET, AS INDICATED IN THE FOLLOWING TABLE:

	MAXIMUM **BUILDING** HEIGHT ABOVE **BASE PLAN** OR **CURB LEVEL**,AS APPLICABLE (IN FEET//)				
WALL CONDITION *	25	35	40	50	OVER 50
WALL TO WALL	20	25	30	35	40
WALL TO WINDOW	30	35	40	45	50
WINDOW TO WINDOW	40	45	50	55	60



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(631)561-5454

BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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DRAWING TITLE

ZONING DEDUCTIONS

JOB NUMBER **5D21xxx**

DRAWING NUMBER

Z-101.00

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ZONING ANALYSIS

BOROUGH: QUEENS BLOCK: 15785 LOT: 4-55 CORNER: YES				
ZONED RESIDENTIAL: R4-1 (USED R6-B)				
ZONING MAP: 31A				
	REQUIRED	EXISTING	PROPOSED	ZONING REFERENCE
LOT AREA	1,700 SF. MIN	15,044.00 SF.	-	ZR-23-32
LOT WIDTH	18 FT MIN	203.39 FT.	-	ZR-23-32
LOT COVERAGE	100% MAX	-	40.5%	ZR-23-153
			PROPOSED	
LOT AREA x MAX FAR (15,044) x (2.20)INCLUSIONARY FAR= 33,096			TOTAL MAX FAR	33,096.00
R6B D.U. FACTOR = 680 MAX.ALLOWABLE D.U. 33,096/680 = 49 UNITS PROP. UNITS = 40 UNITS PROP. AFFORDABLE UNITS = 10 UNITS				
FLOOR LEVEL	EXISTING FLOOR AREA	PROPOSED FLOOR AREA	TOTAL FLOOR AREA	
CELLAR ACCESSORY PARKING	N/A	13,469.00 SF	0.00 SF	ZR-23-153
FIRST FLOOR	N/A	6,500.00 SF	6,500.00 SF	ZR-23-153
SECOND FLOOR	N/A	6,500.00 SF	6,500.00 SF	ZR-23-153
THIRD FLOOR	N/A	6,500.00 SF	6,500.00 SF	ZR-23-153
FOURTH FLOOR	N/A	6,500.00 SF	6,500.00 SF	ZR-23-153
FIFTH FLOOR	N/A	6,500.00 SF	6,500.00 SF	ZR-23-153
DEDUCTIONS	N/A	N/A	N/A	ZR-23-153
MAXIMUM FAR	33,096 SF		32,500. SF ≤ 33,096 SF (MAX. FAR)	
	REQUIRED	EXISTING	PROPOSED	
FRONT YARD SETBACK	N/A	N/A	15 FT	ZR-23-641
REAR YARD SETBACK	30 FT	N/A	30 FT	ZR-23-462
SIDE YARDS MINIMUM AGGREGATE	N/A	N/A	N/A	ZR-23-462
SIDE YARD 1	N/A	N/A	15 FT	ZR-23-462
SIDE YARD 2	N/A	N/A	15 FT	ZR-23-462
REAR YARD EQUIVALENT	N/A	N/A	N/A	ZR-23-462
BASE HEIGHT	30-45 FT MAX	N/A	40 FT	ZR-23-662
BUILDING HEIGHT	50-55 FT MAX	N/A	50 FT	ZR-23-662
REQUIRED PARKING	50% D.U.	N/A	40 D.U /2= 20 REQ. 20 PARKING SPACES ARE PROPOSED	ZR-25-23
NOTE: LOTS LESS THAN 10,000 SQUARE FEET, PARKING CAN BE WAIVED IF FIVE OR FEWER SPACES ARE REQUIRED. OFF-STREET PARKING IS NOT ALLOWED IN FRONT OF A BUILDING.				

PROPOSED FLOOR AREA

1st FLOOR	6,500.00 S.F.	RESIDENTIAL - 2 (2)BEDROOMS APARTMENTS & 2 (1)BEDROOM STUDIO (8 DWELLING UNITS)
2nd FLOOR	6,500.00 S.F.	RESIDENTIAL - 2 (2)BEDROOMS APARTMENTS & 2 (1)BEDROOM STUDIO (8 DWELLING UNITS)
3rd FLOOR	6,500.00 S.F.	RESIDENTIAL - 2 (2)BEDROOMS APARTMENTS & 2 (1)BEDROOM STUDIO (8 DWELLING UNITS)
4th FLOOR	6,500.00 S.F.	RESIDENTIAL - 2 (2)BEDROOMS APARTMENTS & 2 (1)BEDROOM STUDIO (8 DWELLING UNITS)
5th FLOOR	6,500.00 S.F.	RESIDENTIAL - 2 (2)BEDROOMS APARTMENTS & 2 (1)BEDROOM STUDIO (8 DWELLING UNITS)
CELLAR	13,469.0 S.F.	ACCESSORY PARKING GARAGE

Medium-Density Contextual Residence District

R6B	Lot Area min.	Lot Width min.	Rear Yard min.	Lot Coverage max. Corner	Lot Coverage max. Other Lot	FAR max.	Base Height min.–max. (w/QGF)	Building Height max. (w/QGF)	# of Stories max. (w/QGF)	DU Factor	Required Parking min. Basic	Required Parking min. IRHU
Basic	1,700 sf	18 ft	30 ft	100%	60%	2.00	30–40 (45) ft	50 (55) ft	n/a (5)	680	50% of DU	25% of IRHU
Inclusionary						2.20						

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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JACKMAN J. PRESCOD, PE — NEW YORK STATE LICENSED ENGINEER

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DRAWING TITLE

ZONING ANALYSIS

JOB NUMBER **5D21xxx**

DRAWING NUMBER **Z-102.00**

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NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was New York State Plane FIPSZONE 3104. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NINGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3182
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the Department of Information Technology and Telecommunication, City of New York. This information was derived from digital orthophotos produced at a scale of 1:1,200 with 2-foot pixel resolution from photography dated 2004.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map showing the layout of map panels for this jurisdiction.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.

COASTAL BARRIER LEGEND

11-16-1991 Otherwise Protected Area

FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES – NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER NOVEMBER 16, 1991 – NOT USED IN A MANNER CONSISTENT WITH THE PURPOSE OF THE OTHERWISE PROTECTED AREAS.

Comments or concerns regarding the Coastal Barrier Resources System or Otherwise Protected Areas should be directed to the Coastal Barrier Coordinator at the U.S. Fish and Wildlife Service; (413) 253-8657.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the National Geodetic Vertical Datum of 1929

- A — A — Cross section line
- 23 — 23 — Transect line
- 87°07'45", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4,376,000mN — 1000-meter Universal Transverse Mercator grid values, zone 18
- 600000 FT — 5000-foot grid ticks: New York State Plane coordinate system, Long Island zone (FIPSZONE 3104), Lambert Conformal Conic projection
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- ●M1.5 — River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

INITIAL NFIP MAP DATE
June 28, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS
June 11, 1976

FLOOD INSURANCE RATE MAP EFFECTIVE
November 16, 1983

FLOOD INSURANCE RATE MAP REVISIONS
September 5, 2007 - to update map format, to change Special Flood Hazard Areas, and to reflect updated topographic information
May 18, 1992 - to add otherwise protected areas

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP

PANEL 0382F

FIRM

FLOOD INSURANCE RATE MAP

CITY OF
NEW YORK,
NEW YORK
BRONX, RICHMOND, NEW YORK, QUEENS, AND KINGS COUNTIES

PANEL 382 OF 457

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
NEW YORK, CITY OF	360497	0382	F

- NOTE -
THIS MAP INCLUDES COASTAL BARRIER RESOURCES SYSTEM BOUNDARIES ESTABLISHED UNDER THE COASTAL BARRIER RESOURCES ACT OF 1982 AND/OR SUBSEQUENT LEGISLATION.

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
3604970382F

MAP REVISED
SEPTEMBER 5, 2007

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

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FAR ROCKAWAY
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BLOCK: 15785 LOT: 4 & 55

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NEW YORK LICENSE #026687

JACKMAN J. PRESCOD, PE
NEW YORK LICENSE #092436

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FEMA FLOOD MAP

JOB NUMBER
5D21xxx

DRAWING NUMBER
Z-103.00

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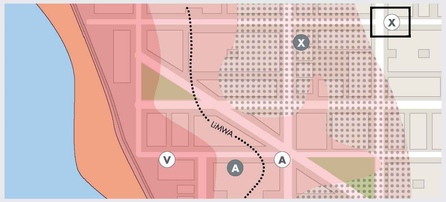
FLOOD HAZARD ZONES

Flood hazards

Many of the strategies in this manual relate specifically to flood risk. Water-related disasters account for approximately 85 percent of all disaster declarations[1] and flooding risks are expected to increase over time.

Flood Insurance Rate Map (FIRM)

Official FEMA maps which show flood zone areas.



- **Flood Zone V** includes coastal properties at risk from wave action greater than 3 ft above still-water base flood levels.
- **Flood Zone Coastal A** includes properties at risk of a base flood and waves between 1.5 and 3 ft.
- **Flood Zone A** includes properties beyond the Limit of Moderate Wave Action (LiMWA), or near rivers and lakes.
- **Special Flood Hazard Area (SFHA)** Any land area at risk by a 100-year base flood (Flood Zones V and A).
- **Flood Zone Shaded X** includes properties in the 500-year floodplain.
- **Flood Zone Unshaded X** designates properties that are outside the 500-year floodplain and at very low risk of flooding.

National Flood Insurance Program (NFIP) is an insurance option administered by FEMA for participating communities. NFIP premiums for building owners are determined by flood risk to the building. Premiums may be reduced by implementing NFIP-approved mitigation measures. Any building owner holding a federally-backed mortgage on a property in the SFHA is required to purchase flood insurance from NFIP or a third party. NFIP also covers property loss and is available to renters and condominium owners.

[1] *www.fema.gov/news-release/2015/02/05/federal-flood-risk-management-standard*

ELEVATION TERMINOLOGY

Elevation Terminology

Guidance on flood mitigation can be highly technical. Being familiar with these terms will help you better understand the recommendations in the following strategies.

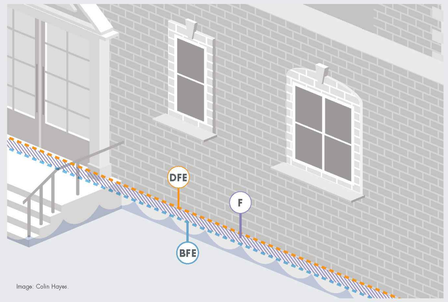


Image: Colin Hayes

- **BFE** **Base Flood Elevation (BFE)** is measured from the crest of expected wave height. It does not take into account future sea-level rise from climate change.
- **DFE** **Design Flood Elevation (DFE)** is BFE plus an additional amount of safety buffer or "freeboard". Although guidance varies by local codes, this is generally 1-2 ft. above the BFE. All design and elevation recommendations in this manual will refer to DFE.
- **F** **Freeboard** is an additional safety buffer above the Base Flood Elevation. It can be thought of as the difference between the Base Flood Elevation and Design Flood Elevation

Elevation Certificate lets a homeowner determine where their building lies in relation to the BFE. This document is required when purchasing flood insurance.

DFE ELEVATION REQUIREMENT BY STRUCTURE OCCUPANCY CATEGORY

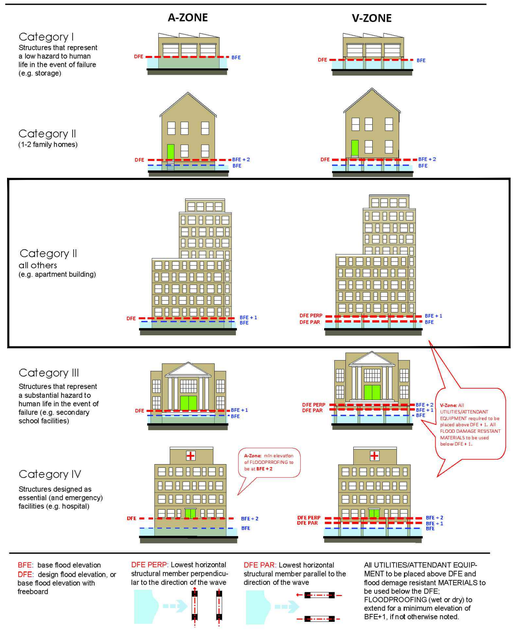


Figure 02. Minimum elevation requirements for buildings in flood zones by structure occupancy category - NYC Building Code 2008

SEA LEVEL -DESIGN FLOOD ELEVATION TABLE

Table 4 - Determine the sea level rise-adjusted design flood elevation (DFE)[83]

End of Useful Life	Base Flood Elevation (BFE)[84] in NAVD 88	+ Freeboard[85]	+ Sea Level Rise Adjusement[86]	= Design Flood Elevation (DFE) in NAVD 88
Critical[87] Facilities				
2020s (through to 2039)	FEMA 1% (PFIRM)	24"	6"	= FEMA 1% + 30"
2050s (2040-2069)	FEMA 1% (PFIRM)	24"	16"	= FEMA 1% + 40"
2080s (2070-2099)	FEMA 1% (PFIRM)	24"	28"	= FEMA 1% + 52"
2100+	FEMA 1% (PFIRM)	24"	36"	= FEMA 1% + 60"
Non-critical Facilities				
2020s (through to 2039)	FEMA 1% (PFIRM)	12"	6"	= FEMA 1% + 18"
2050s (2040-2069)	FEMA 1% (PFIRM)	12"	16"	= FEMA 1% + 28"
2080s (2070-2099)	FEMA 1% (PFIRM)	12"	28"	= FEMA 1% + 40"
2100+	FEMA 1% (PFIRM)	12"	36"	= FEMA 1% + 48"

Additional analysis should be conducted to incorporate wave action and wave run-up in DFE calculations especially in areas that are located within the FEMA's 1% annual chance Limit of Moderate Wave Action (LiMWA) zone. Wave run-up is the maximum vertical extent of wave uprush above surge.

***Facilities defined as critical**

The criticality definitions below are for use in the application of the Guidelines only. All items identified as critical in NYC Building Code Appendix G are critical in these Guidelines; however, this list includes additional facilities that are not listed in Appendix G.[87] If a facility is not listed here, it is considered non-critical for the purposes of these Guidelines.

- Hospitals and health care facilities;
- Fire, rescue, ambulance, and police stations, as well as emergency vehicle garages;
- Jails, correctional facilities and detention facilities;
- Facilities used in emergency response, including emergency shelters, emergency preparedness, communication, operation centers, communication towers, electrical substations, back-up generators, fuel or water storage tanks, power generating stations and other public utility facilities;
- Critical aviation facilities such as control towers, air traffic control centers and hangars for aircraft used in emergency response;
- Major food distribution centers (with an annual expected volume of greater than 170,000,000 pounds);[88]
- Buildings and other structures that manufacture, process, handle, store, dispose, or use toxic or explosive substances where the quantity of the material exceeds a threshold quantity established by the authority having jurisdiction and is sufficient to pose a threat to the public if released;[89]
- Infrastructure in transportation, telecommunications, or power networks including bridges, tunnels (vehicular and rail), traffic signals, (and other right of way elements including street lights and utilities), power transmission facilities, substations, circuit breaker houses, city gate stations, arterial roadways, telecommunications central offices, switching facilities, etc.;
- Ventilation buildings and fan plants;
- Operations centers;
- Pumping stations (sanitary and stormwater);
- Train and transit maintenance yards and shops;
- Wastewater treatment plants;
- Water supply infrastructure;
- Combined-sewer overflow (CSO) retention tanks;
- Fueling stations;
- Waste transfer stations; and
- Facilities where residents have limited mobility or ability, including care facilities and nursing homes.

[83] If an industry design standard does not include freeboard in its flood protection standards for particular infrastructure assets, then only consider the sea level rise adjustment when determining flood protection levels.

[84] Note that NYC Building Code requires developers to use the PFIRM (2015) or the FIRM (2007), whichever is more restrictive. Where the NYC Building Code differs from the Guidelines, use whichever requires the higher DFE. Refer to the latest version of Appendix G of the NYC Building Code

[85] These freeboard values reflect NYC Building Code Appendix G Table 2-1, which establishes the minimum elevation of the top of lowest floor. Appendix G requires other freeboard values for other parts of structures and in different parts of the floodplain. Refer to Appendix G for the appropriate freeboard and use that value in Table 3 above.

[86] The sea level rise figures provided are for the middle of the 25th-75th percentile range projections from the NPCC. These values do not necessarily indicate the average of all models.

[87] The structural occupancy categories outlined in Appendix G of the NYC Building Code are the same as in ASCE 7 used for structural design. For critical buildings, structural design should comply with ASCE 7 and 24 for design class IV.

[88] This threshold represents the median volume of main food distributors in NYC according to statistics collected as part of the Five Borough Food Flow study in 2016, available at https://www.nycedc.com/system/files/files/resource/2016_food_supply-resiliency_study_results.pdf.

[89] The threshold quantity for hazardous materials is established by Chapter 7 of Title 24 of the NYC Administrative Code.

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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DRAWING TITLE

FLOOD HAZARD ZONES & FLOOD ELEV.

JOB NUMBER
5D21xxx

DRAWING NUMBER
Z-104.00

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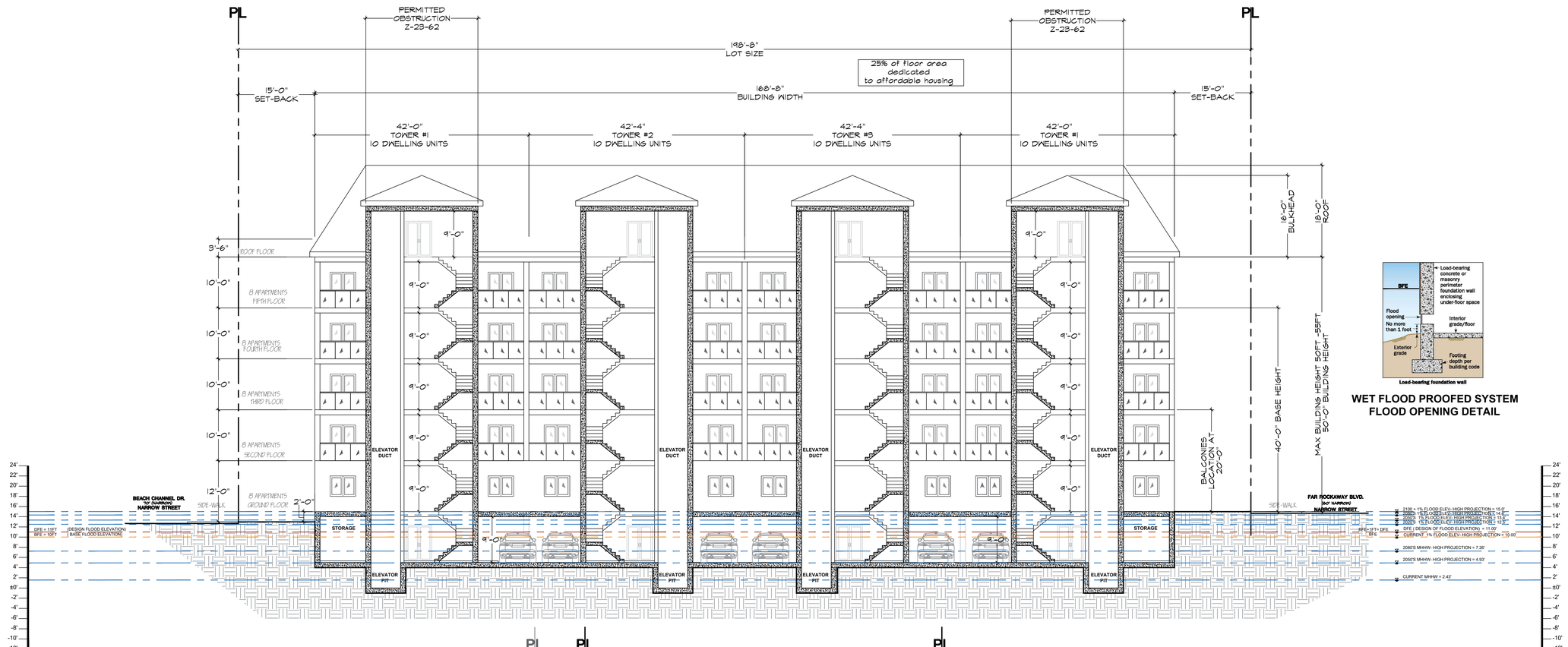
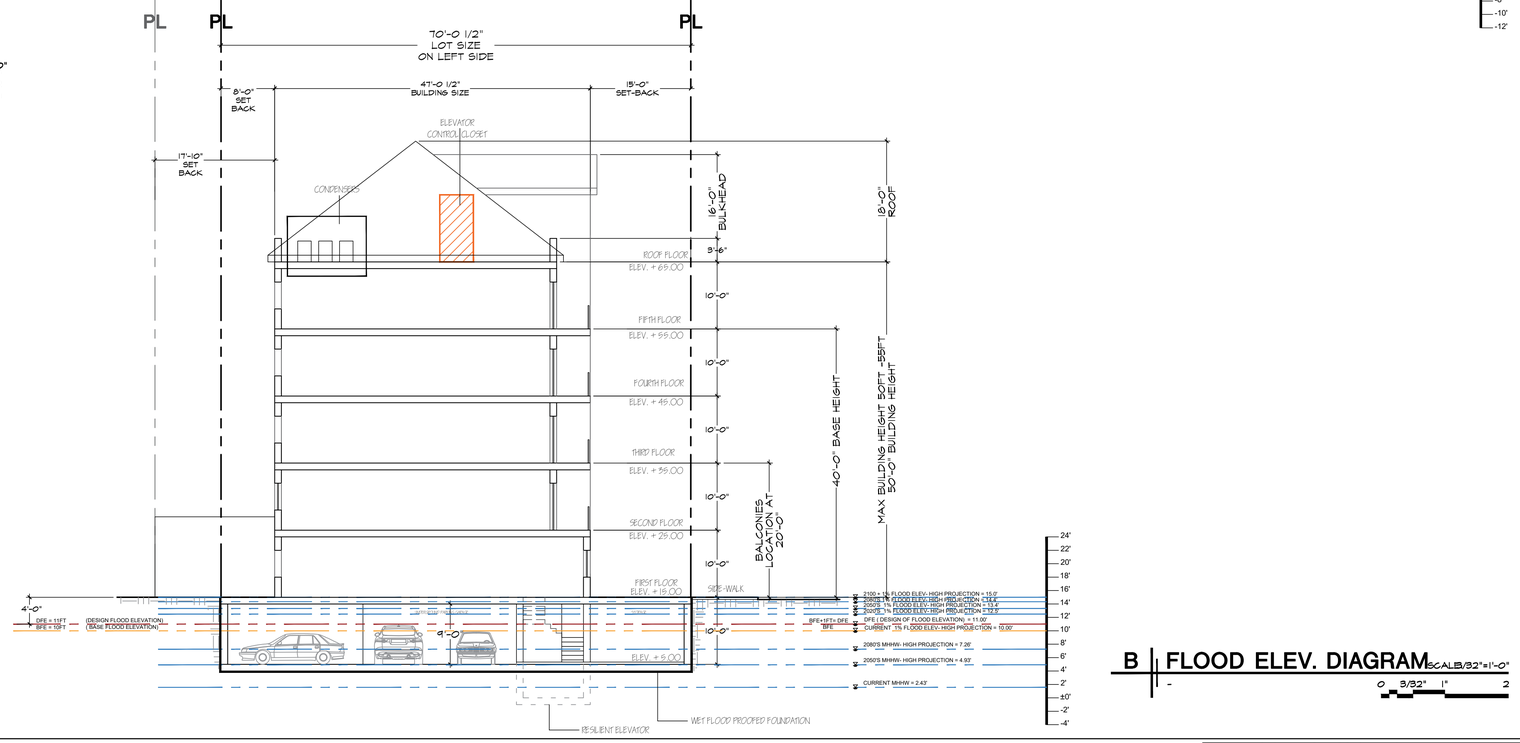


Load-bearing foundation wall

WET FLOOD PROOFED SYSTEM FLOOD OPENING DETAIL

A | FLOOD ELEV. DIAGRAM SCALE:3/32"=1'-0"



B | FLOOD ELEV. DIAGRAM SCALE:3/32"=1'-0"

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FLOOD ELEVATION SECTIONS

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FLOOD PROTECCTION SYSTEMS

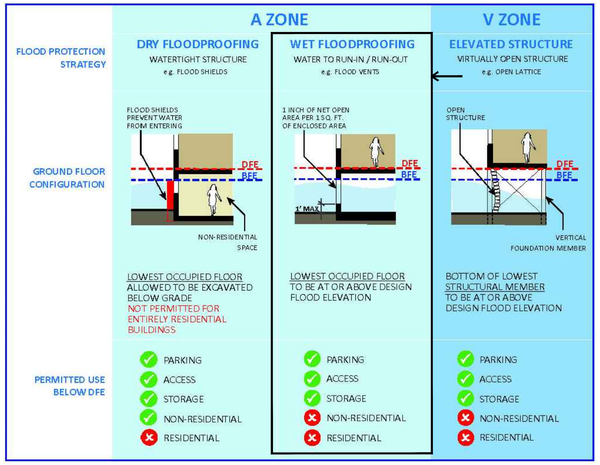

Figure 03. Design and Construction requirements for buildings in the SFHAs

WET FLOOD PROOFING SYSTEM

HYDROSTATIC PRESSURE WITH WET FLOOD PROOFING

If water is allowed to enter, the hydrostatic pressures on both sides of the walls and floor become the same, or equalized, and the walls are much less likely to fail (figure fp-3).

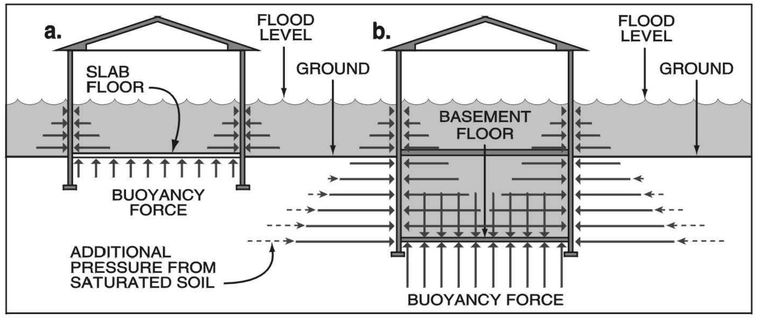

Figure FP-3—Hydrostatic Pressure Diagram With Wet Flood Proofing

WET FLOOD PROOFING SYSTEM

1 Wet Floodproofing

Aligns with Enterprise Green Communities Criteria: **5.8a Resilient Energy Systems: Floodproofing.**



1 Engineered flood vents allow water to infiltrate non-living space.

Strategies not pictured:

Use water-resistant building materials.

Relocate or elevate equipment that cannot be exposed to water.

Image: Colin Hayes

1 Wet Floodproofing

Wet floodproofing allows unoccupied portions of a building to be flooded during a storm. It can greatly reduce damage and recovery time. Older buildings may not be designed to withstand the hydrostatic pressure that occurs with dry floodproofing (blocking water from entering the building). With these buildings, or when dry floodproofing is prohibited by code, it is important to allow water to flow through a building in a controlled way. The space can then be dried after flood water has receded.

Description + function

FEMA defines wet floodproofing as "permanent or temporary measures applied to a structure or its contents that prevent or provide resistance to damage from flooding while allowing floodwaters to enter the structure or area. Generally, this includes properly anchoring the structure, using flood resistant materials below the Base Flood Elevation (BFE), protection of mechanical and utility equipment, and use of openings or breakaway walls."[2]

Strategy into action

Relocate or protect equipment that cannot be exposed to water.

Electrical panels, mechanical equipment, gas and electric meters and shut-offs should be relocated from flood-prone areas to locations above the DFE. If that is not possible, they should be protected in place. (See Strategy: Dry Floodproofing.)



Wet floodproofing vents should be located below the BFE and no more than 1 ft. above the ground.
(See Strategy: Elevated Equipment)
Image: www.yourfloodrisk.ca

Provide floodwater entry and exit points.

To avoid structural damage due to hydrostatic pressure during flooding, provide multiple vent openings through which floodwater can enter and exit.

To satisfy NFIP requirements, the entry points should be flood openings that meet NFIP requirements for number, size and location. Blockage of entries by flood debris must also be taken into consideration.

[2] www.fema.gov/floodplain-management/wet-floodproofing

WET FLOOD PROOFING SYSTEM

1 Wet Floodproofing

Operations + maintenance

Use water-resistant building materials below the Design Flood Elevation (DFE).

Building materials installed in floodable spaces—including framing, wallboard, flooring and ceiling paneling—should be able to survive water exposure without major damage, promoting mold or mildew, or absorbing contaminants. Building materials under the DFE should be able to withstand contact with flood waters for up to 72 hours without requiring more than cosmetic repairs.

In coastal areas with salt water, corrosion of metals may be a problem. Materials that might dry out and be usable after exposure to fresh water may be damaged beyond repair by salt water.

Before flooding.

Items used or stored in flood-prone basements or ground-floor spaces should be moved out of the building or to higher floors in advance of a flood. These include:

- Vehicles.
- Mechanical equipment including lawn mowers and snow blowers.
- Furniture.
- Area rugs.
- Residents' belongings.
- Cleaning supplies and toxic chemicals.

How to quickly remove such items out of floodable spaces before a predicted flood should be clearly laid out in an emergency plan. (See Strategy: Developing an Emergency Management Manual).

After flooding.

Polluted floodwater poses a health risk to facility operators. Engage professional cleaning teams who have been trained and have equipment to mitigate exposure risk. Use commercial fans and dehumidifiers to dry out affected areas to prevent mold growth.

Hydrostatic pressure refers to the pressure exerted by still or slowly-moving floodwater or groundwater against building walls and floors. Hydrostatic pressure increases as the depth of the floodwater increases.

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FLOOD PROTECTION SYSTEMS

JOB NUMBER 5D21xxx

DRAWING NUMBER Z-106.00

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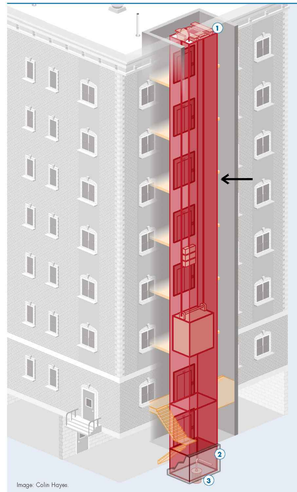
FLOOD PROTECTION STRATEGIES-RESILIENT ELEVATOR

4 Resilient Elevators

Aligns with Enterprise Green Communities Criteria:
5.8a Resilient Energy Systems: Floodproofing.



1. Install elevators with motors and controllers above the Design Flood Elevation.
2. Reinforce the shaft below the Design Flood Elevation.
3. Install a sump pump in the elevator pit.

+ *Strategies not pictured:*

Dry floodproof pit components that cannot be elevated.

Install flood alarms in the elevator pit.

Set controls to prevent the cab from lowering into floodwater.

Image: Colin Hayes

HOLE-LESS HYDRAULIC ELEVATOR

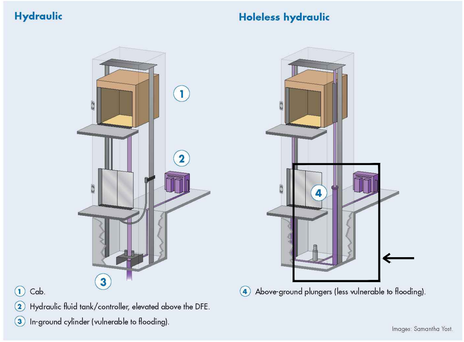
4 Resilient Elevators

Elevators are often the only way vulnerable residents have to reach higher floors, making them a critical building system. They are particularly vulnerable to flood damage because elevator pits typically extend well below the lowest floor. Even outside flood zones, elevators can be damaged by plumbing failures, sprinkler system runoff after a fire and sewer backup.

Description + function

Different types of elevators have different vulnerability to flooding.

» **Hydraulic elevators** are pushed up by pistons. They are found in some low-rise buildings (usually with five floors or fewer). Holeless hydraulic elevators are preferred in flood zones because the piston is positioned well above the bottom of the elevator shaft, which reduces the risk of hydraulic fluid contaminating the floodwater. The elevator pit usually extends 4 to 5 ft. below the lowest access level of a hydraulic elevator.



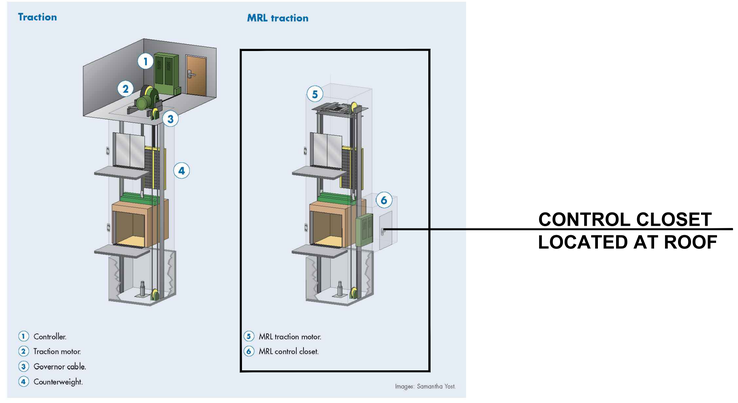
1. Cab.
2. Hydraulic fluid tank/controller, elevated above the DFE.
3. In-ground cylinder (vulnerable to flooding).
4. Above-ground plungers (less vulnerable to flooding).

Images: Samantha Yost

RESILIENT ELEVATOR

4 Resilient Elevators

» **Traction elevators** hoist the elevator up with a traction motor and are more common in multifamily buildings. In many older traction elevators, a machine room on the roof houses the elevator controls and mechanical elements. Newer machine room-less (MRL) traction elevators require a control closet, which can be located at any level near the elevator shaft. The elevator pit usually extends 6 to 8 ft. below the lowest access level of a traction elevator.



1. Controller.
2. Traction motor.
3. Governor cable.
4. Counterweight.
5. MRL traction motor.
6. MRL control closet.

Images: Samantha Yost

CONTROL CLOSET LOCATED AT ROOF

ELEVATOR CONTROLS

4 Resilient Elevators

Strategy into action

» Sizing of elevator motors are an important consideration when determining backup power requirements.

» Elevator shafts that extend below the DFE should be designed and built to resist the hydrostatic pressure of floodwater. Appropriate shaft construction materials include reinforced masonry block and reinforced poured concrete.

» During power outages in buildings of four stories or more, advanced elevator controls should automatically shut down all but one elevator at a flood-safe floor, while allowing the functioning elevator to operate on backup power. (See Strategy: Maintaining Power to Critical Systems).

Elevator controls.

» Keep electronic elevator controls above the DFE in the rooftop machine room (for conventional traction elevators) or in a mechanical closet adjacent to the elevator shaft on an upper floor (for MRL traction elevators).

» Set elevator controls to prevent cabs from being lowered to a flood-prone lower floor during a power outage or flood. Install one or more float switches in the elevator pit with controls to prevent the elevator cab from descending into a flooded pit. Designate fire recall floors above the DFE.

» Install flood alarms in pits. Install controls to keep the elevator cab out of a flooded shaft.

1. Relocate the hydraulic controller or traction motor to a location above the DFE.
2. In new construction, install hole-less hydraulic elevators, in which the plungers are located high off the ground and out of the reach of floodwater.
3. Install a flood alarm to alert the operator when the pit is flooded.
4. Dry floodproof any electric equipment that cannot be elevated.
5. Install a sump pump with a separator for hydraulic fluid.
6. Reinforce shaft walls and floors below the DFE.

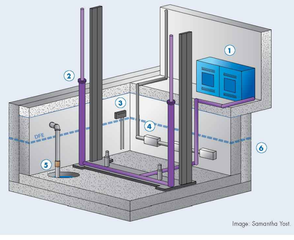


Image: Samantha Yost

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FLOOD PROTECCTION STRATEGIES

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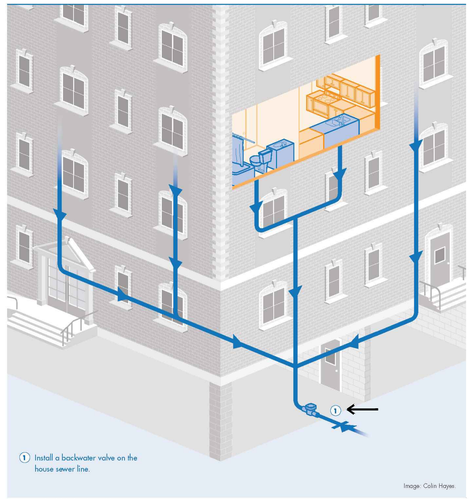
FLOOD PROTECTION STRATEGIES-BLACK WATER VALVES

5 Backwater Valves

Aligns with Enterprise Green Communities Criteria:
5.8a Resilient Energy Systems: Floodproofing.



1 Install a backwater valve on the house sewer line.

Image: Colin Hayes

BLACK WATER VALVES- INSTALLATION

Strategy into action

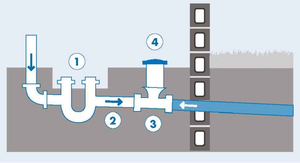
Installation.

Municipal codes often require the installation of backwater valves in new construction sited in flood zones. Property owners outside flood zones should also consider backwater valves because sewers can back up any time, not just during extreme weather events. Building codes may also prohibit backwater valves. A plumbing professional will be able install a code-compliant system.

Backwater valves should be installed on the street side of the house trap. Improper installation could cause the trap to fail. To ensure smooth flow, there should be at least 2 ft. of un-branched pipe upstream of the backwater valve.

1. Backwater valves should be installed on the street side of the house trap.
2. There should be 2 ft. of unbranched pipe at a 2 percent slope upstream of the backwater valve.
3. Backwater valves stop backflow from the municipal sewer system.
4. An access hatch allows cleaning and maintenance.

Image: Samantha Yost / Matthew Goodrich



Depending on its size and the configuration of drain piping in the basement, a building may have just one backwater valve connected to the main sewer line, or separate valves may be installed on different lines and drains. Backwater valves should be enclosed in a masonry pit with a waterproof cover giving access for cleaning and maintenance.

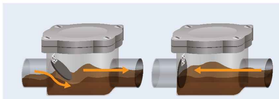
Sewage backflow occurs when storm water backs up into a building basement because of sewer line blockage or storm drain overflow due to flooding. A backwater valve is a relatively inexpensive retrofit that can prevent significant problems from sewer line failure by blocking reverse flow from entering the building through wastewater pipes.

Description + function

Backwater valves allow waste water to flow out, but automatically close if the flow is reversed.

Image: Colin Hayes

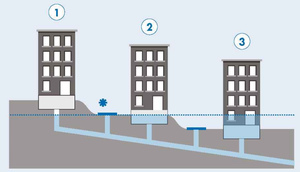
Backwater valves are installed where the wastewater pipe exits the building, so sewage only flows outward. Valves have a hinged flapper that remains open to allow outward flow, but seals tightly if there is backpressure.



Backwater valves are situated above the external sewer line and should be installed in buildings that have sewer connections below the highest manhole cover in the sewer system, especially if the property is within the Special Flood Hazard Area (SFHA). Although sewer blockage can occur any time, it is most likely to happen during storms when large amounts of water and debris move through the system.

Building (1) does not require a backwater valve because it is located above the highest manhole in the sewer system.* Building (2) may have some basement flooding if a backwater valve is not installed. Building (3) will be flooded in its basement and some living spaces if sewers back up.

Image: Samantha Yost / Matthew Goodrich



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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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JACKMAN T. PRESCOD, PE
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DRAWING TITLE

FLOOD PROTECCION STRATEGIES

JOB NUMBER 5D21xxx

DRAWING NUMBER Z-108.00

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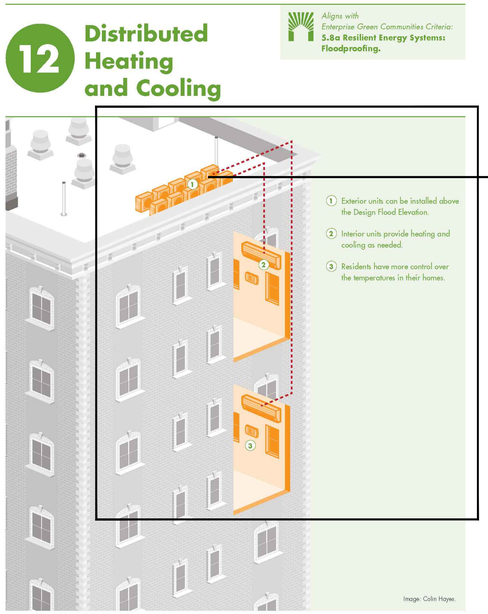
FLOOD PROTECTION STRATEGIES - MECH. UNITS INSTALLED ABOVE DFE



CONDENSERS LOCATED AT ROOF

Strategies for Multifamily Building Resilience 82

DECENTRALIZED HEATING AND COOLING SYSTEM (SPLIT SYSTEM)

12 Distributed Heating and Cooling

Strategy into action

Installing equipment.

Outside condenser units can be mounted on raised platforms outside the building, on special brackets on exterior walls, or on the roof, depending on the building. All exterior units must be sufficiently anchored against high winds.

Connecting the inside and outside components of the mini-split system will require drilling through interior and sometimes, exterior walls.

Operations + maintenance

Residents who do not have air conditioning may have increased electricity costs with the installation of a sub-metered mini-split system. Tenants should be informed about how to operate their units cost-efficiently.

Mini-split maintenance includes cleaning filters and condenser coils, and regular refrigerant charge, and inspection of drain pan, blower wheel, fan, condensate tubing and electrical connection.

Mini-splits on a roof above the risk of flooding.
Image: The Bluestone Organization.



Strategies for Multifamily Building Resilience 84

DECENTRALIZED HEATING AND COOLING SYSTEM (SPLIT SYSTEM)

12 Distributed Heating and Cooling

Decentralized and high-efficiency heating and cooling systems distributed throughout a building can help avoid flood damage while lowering operating costs. Distributed systems are most effective in buildings with high-performance windows and well-insulated, airtight envelopes.

Description + function

Distributed systems provide heating and cooling inside a residential unit, giving residents greater control over the temperature in their apartment and dramatically reducing distribution losses. Dedicated boilers, warm-air furnaces, window-mounted air conditioners or through-the-wall heating/cooling units can be installed in individual apartments. Air-source variable refrigerant flow (VRF) units, also known as mini-splits, are a newly viable option for residential multifamily buildings. A split system locates some hardware indoors and some outdoors. Mini-splits are much smaller than commercial split systems.

A mini-split interior unit provides localized heating and cooling.

Right: The exterior unit is connected to the interior unit via small refrigerant pipes.



Until recently, VRF units were not very efficient, especially in colder climates. New units work much better, even in northern areas.

Conversion from a central to a distributed system provides many advantages:

- Virtually eliminates flood risk because almost all the equipment is located above the basement.
- Improves climate control efficiency by heating or cooling only spaces in use—not the entire building.
- Provides residents with a significantly greater control of temperature in their homes.
- Allows sub-metering of heating and cooling energy (where permitted by law).

Mini-splits can be significantly less expensive to operate than many fossil-fueled systems. An *online fuel cost calculator*" developed by BuildingGreen, Inc. compares operating costs of different heating options (See Resources).

Strategies for Multifamily Building Resilience 83

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MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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KEITH NICHOLAS STRIGA AIA
NEW YORK STATE LICENSE 027117

JACKMAN T. PRESCOD, PE
NEW YORK STATE LICENSE 087618

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FLOOD PROTECCION STRATEGIES

JOB NUMBER **5D21xxx**

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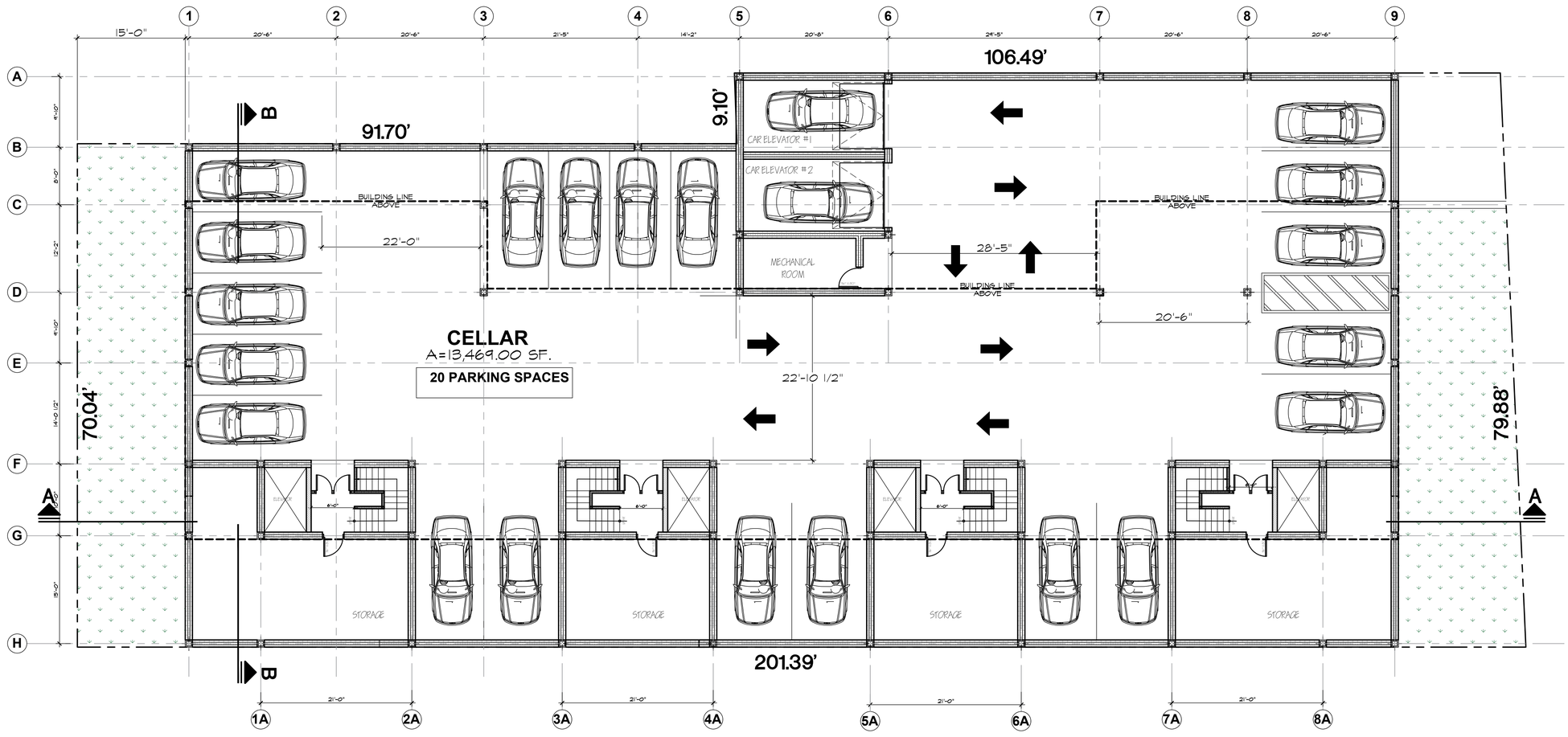

CELLAR PLAN

PARKING GARAGE

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

PARKING CALCULATIONS

REQUIRED PARKING BASIC : 50% OF D.U.

TOTAL D.U. = 40 UNITS -50%

TOTAL REQUIRED PARKING SPACES= 20 - PROPOSED=20 THEREFORE OK.

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MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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PROPOSED CELLAR PARKING GARAGE

JOB NUMBER **5D21xxx**

DRAWING NUMBER **A-100.00**

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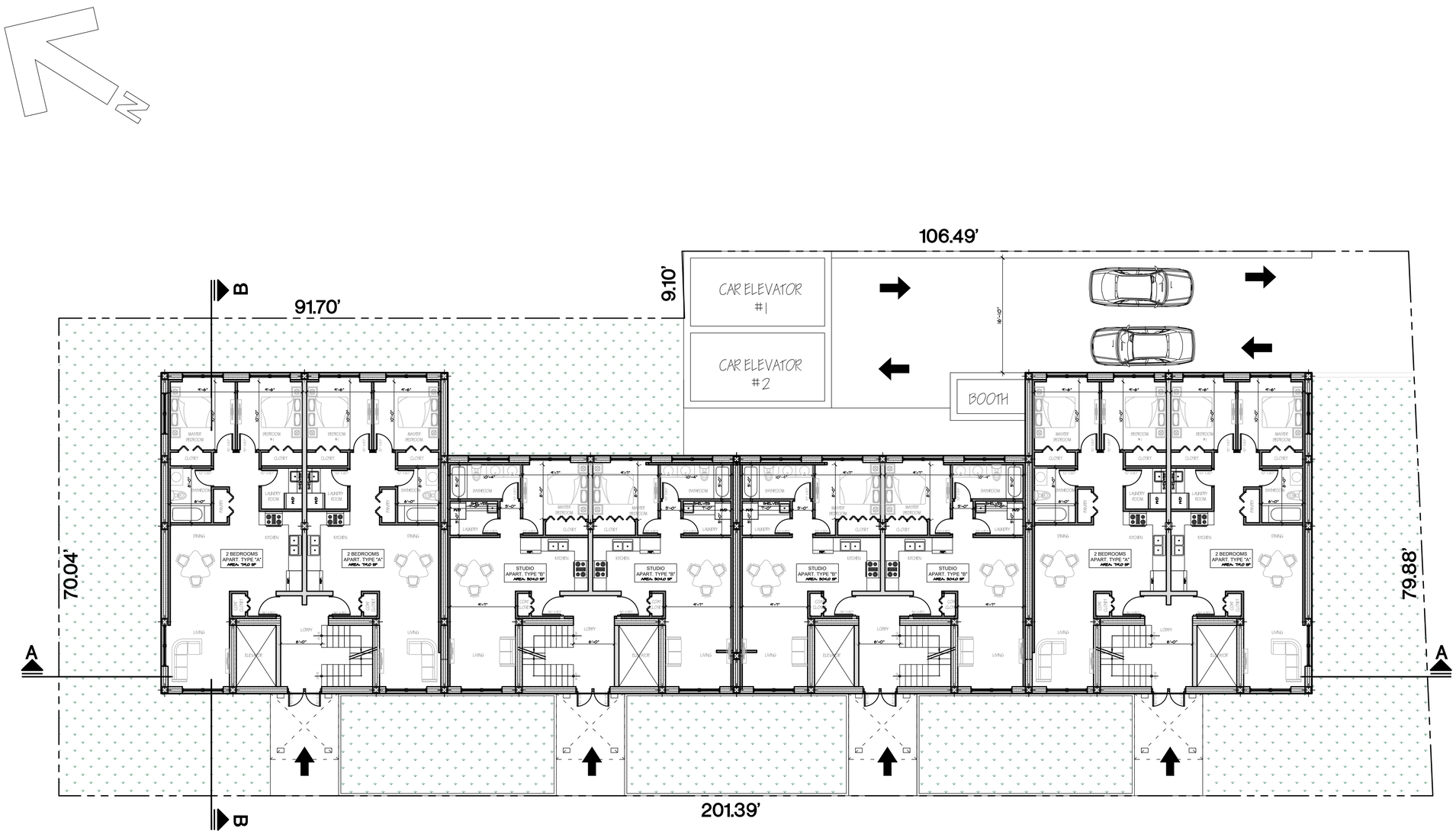

FIRST FLOOR

PROPOSED PLAN

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

DWELLING UNIT CALCULATIONS

R6B D.U. FACTOR = 680

MAX. ALLOWABLE D.U. 33,096/680 = 49 UNITS

PROP. D.U. = 8 PER FLOOR = 8 UNITS x 5 FLOORS =40 D.U.

PROP. AFFORDABLE D.U. = 10 UNITS

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MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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JACKMAN T. PRESCOD, PE — NEW YORK STATE LICENSED ENGINEER

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DRAWING TITLE

PROPOSED FIRST FLOOR PLAN

JOB NUMBER **5D21xxx**

DRAWING NUMBER **A-101.00**

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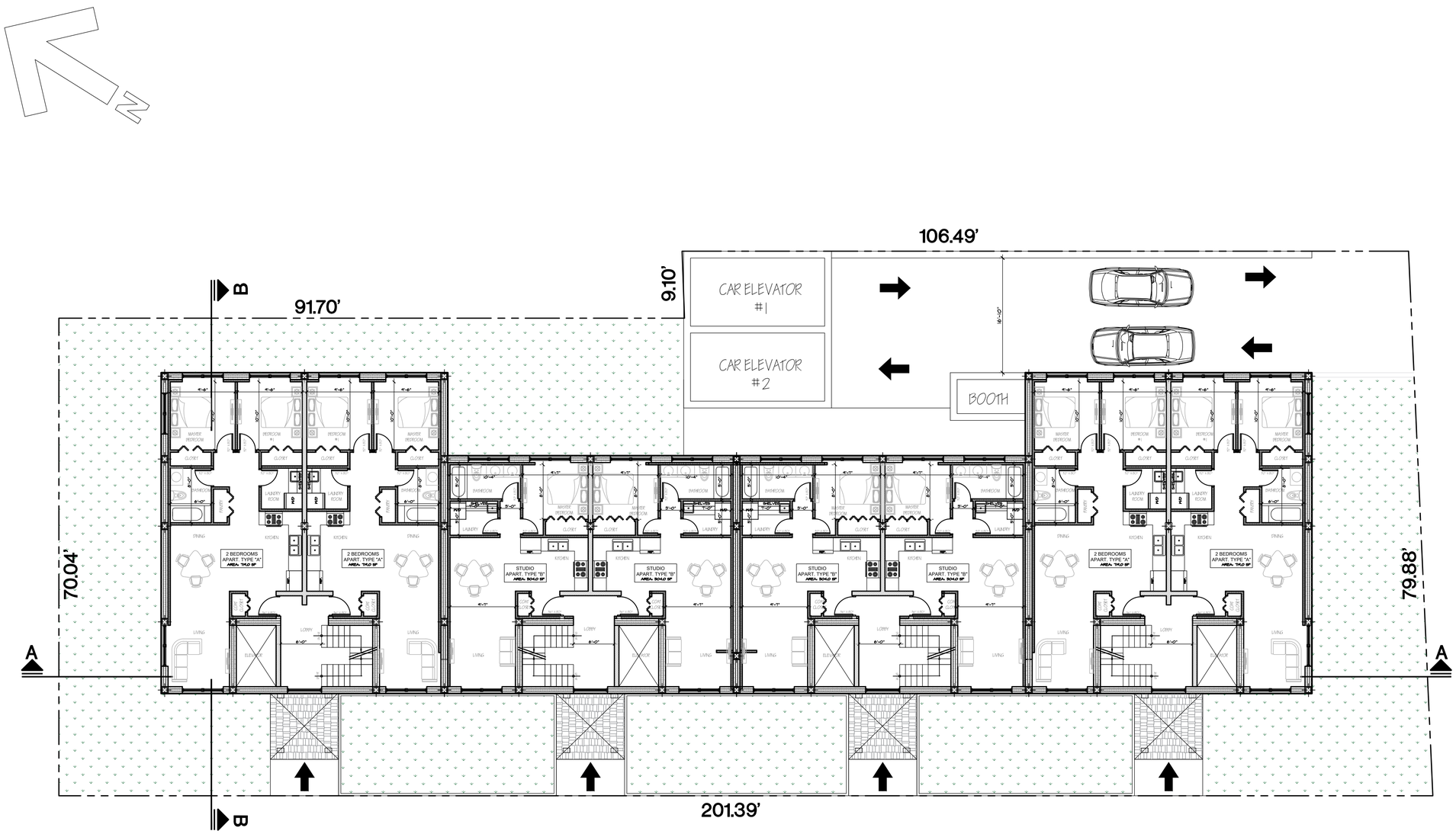

SECOND FLOOR

PROPOSED PLAN

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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PROPOSED 2ND FLOOR PLAN

JOB NUMBER

5D21xxx

DRAWING NUMBER

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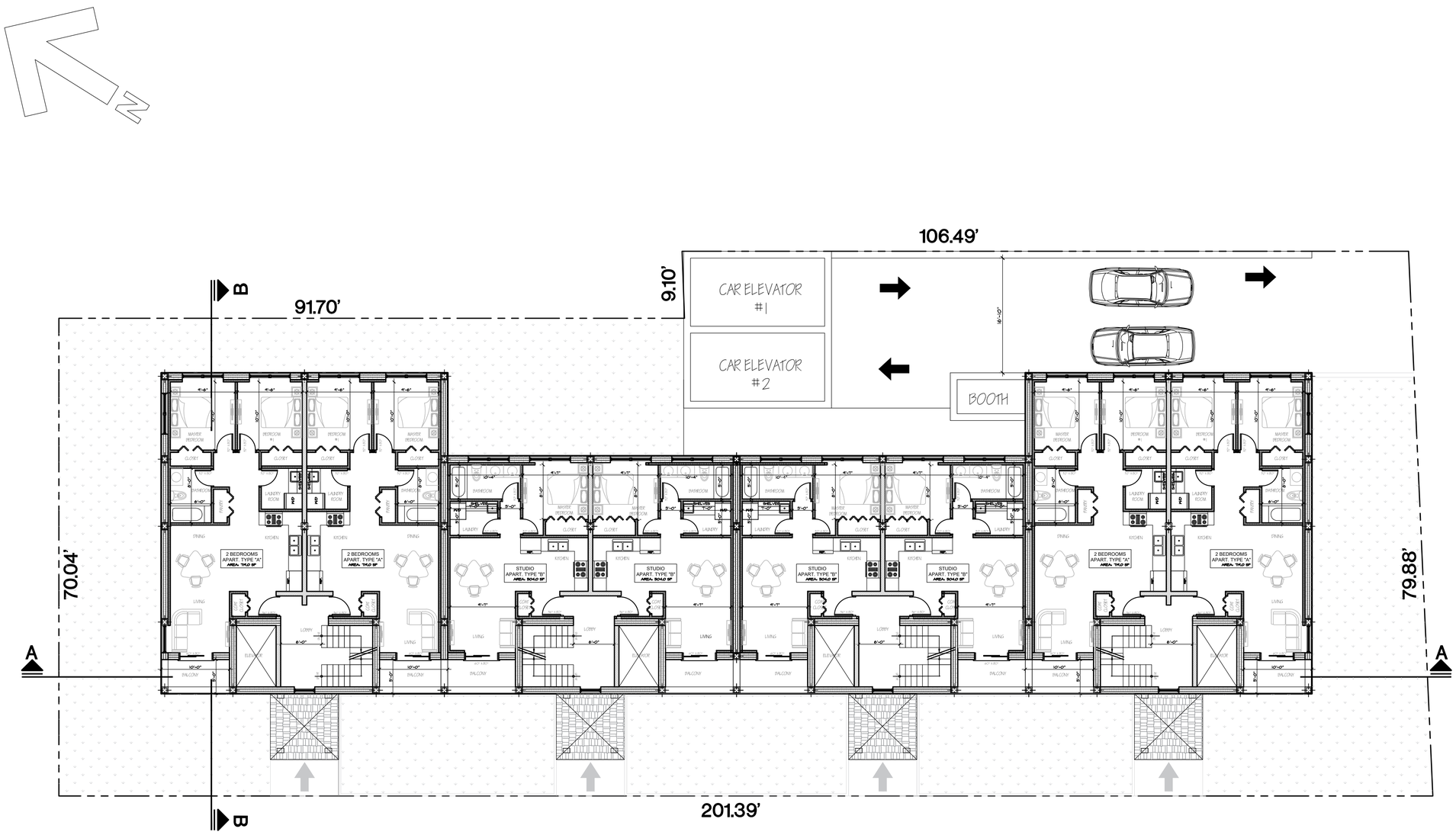

3RD FL. TO 5TH FL.

SCALE: 1/8"=1'-0"

PROPOSED PLAN

0 1/8" 1" 2

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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PROPOSED 3RD TO 5TH FLOOR PLAN

JOB NUMBER

5D21xxx

DRAWING NUMBER

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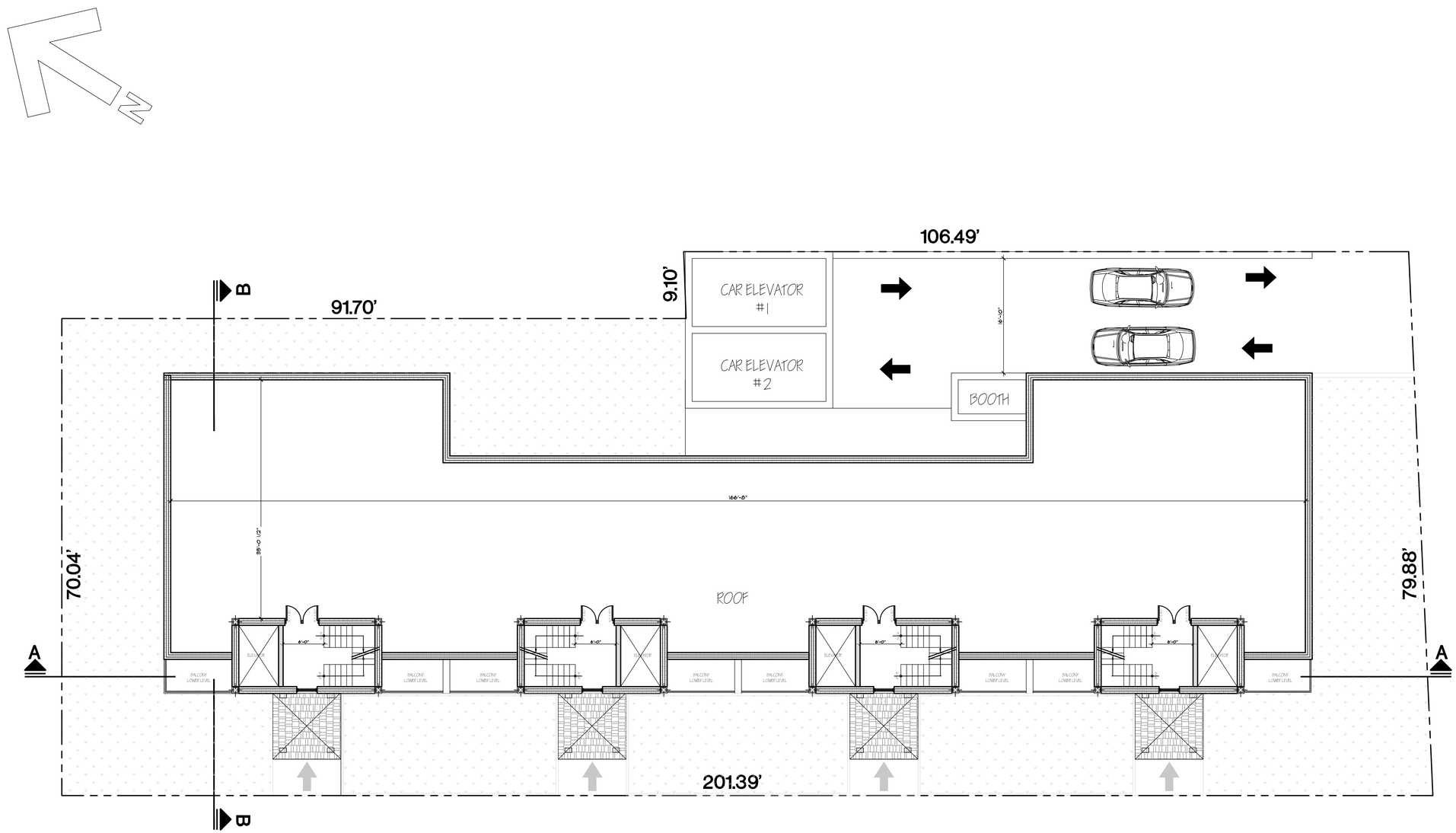

ROOF FLOOR

PROPOSED PLAN

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

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(631)561-5454

BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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PROPOSED ROOF FLOOR

JOB NUMBER

5D21xxx

DRAWING NUMBER

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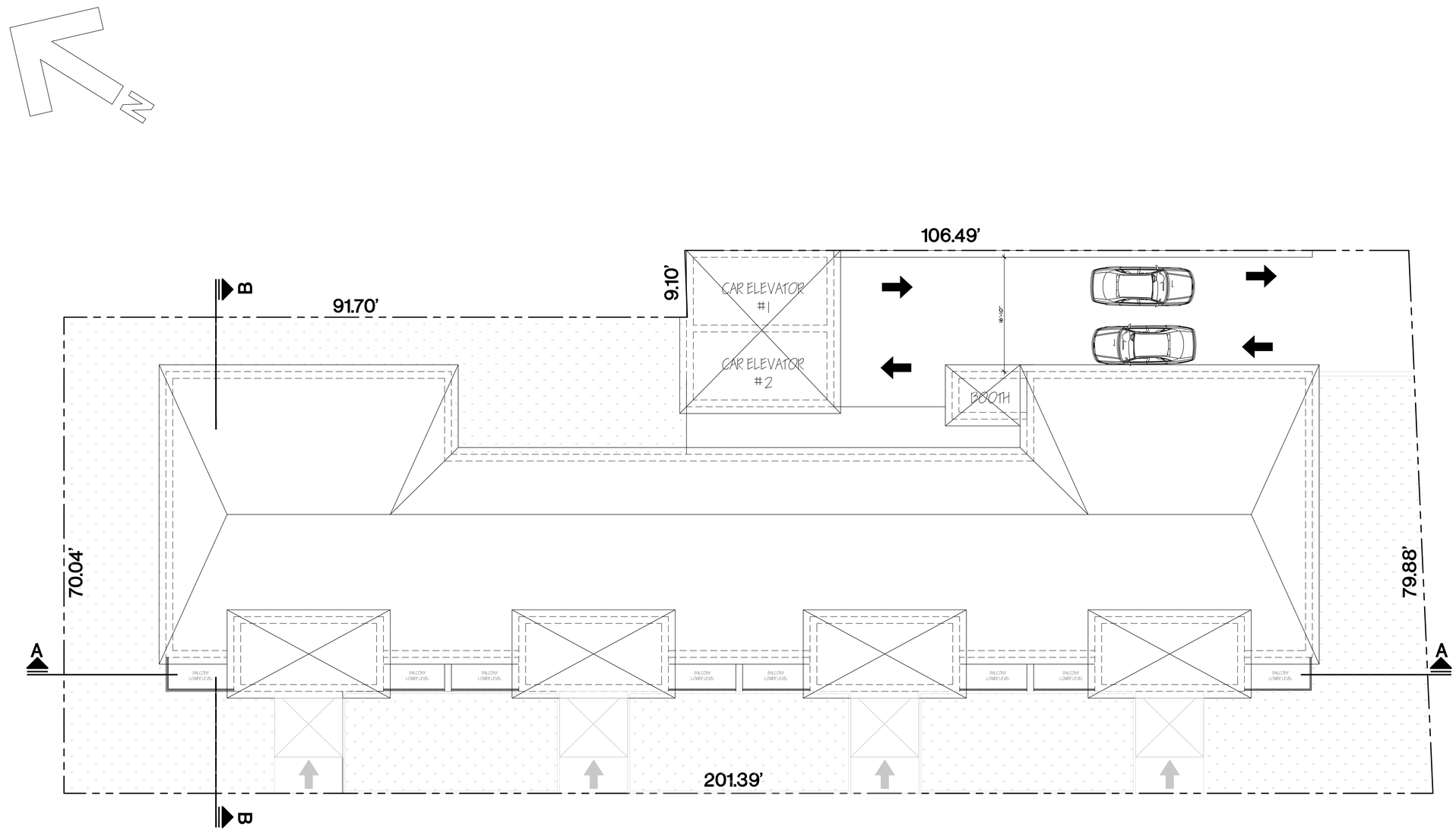

ROOF
PROPOSED PLAN

SCALE: 1/8"=1'-0"
0 1/8" 1" 2

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(631)561-5454

BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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KEITH NICHOLAS STRIGA, AIA
NEW YORK LICENSED ARCHITECT
026177

JACKMAN J. PRESCOD, PE
NEW YORK LICENSED ENGINEER
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PROPOSED ROOF PLAN

JOB NUMBER
5D21xxx

DRAWING NUMBER
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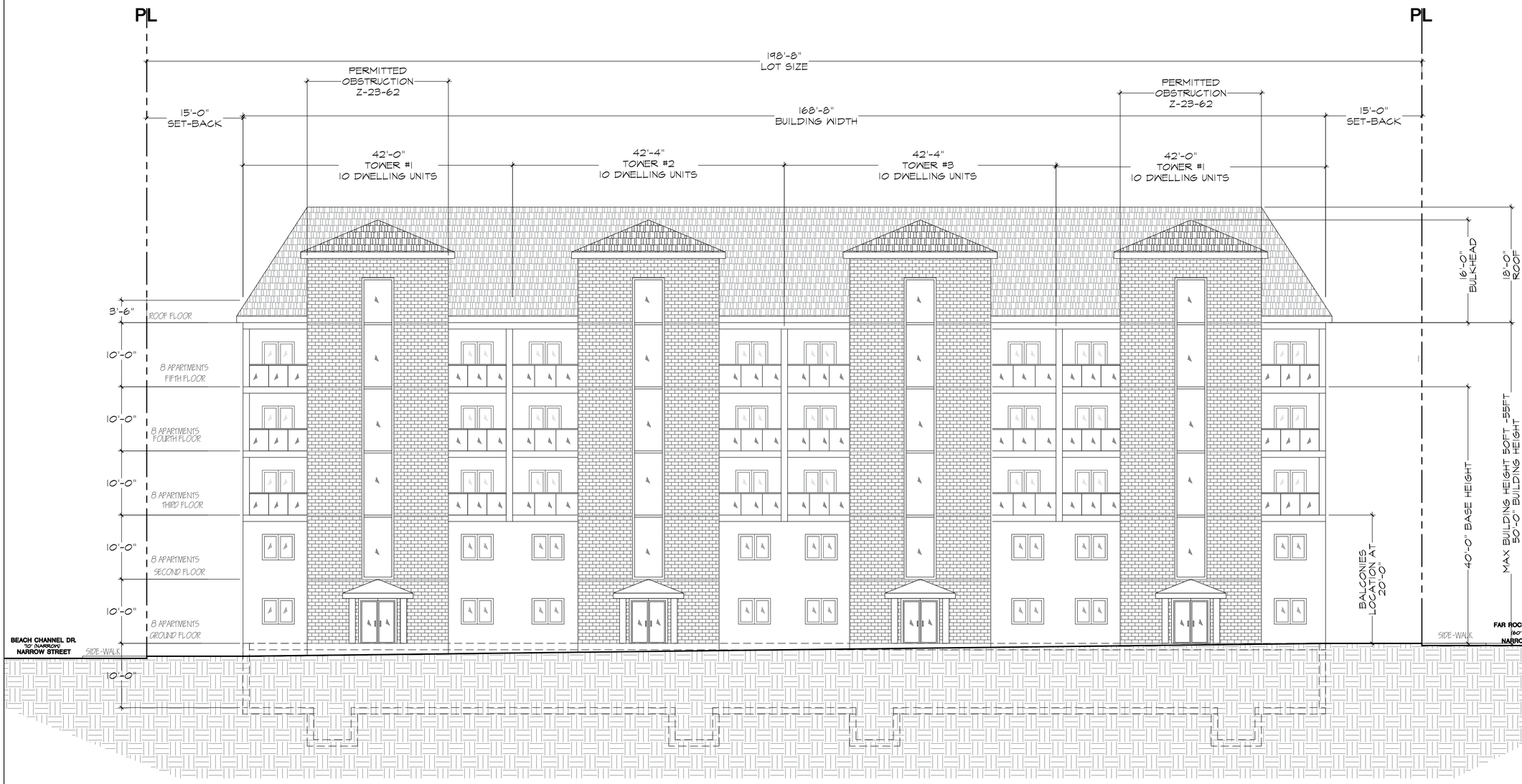

FRONT ELEVATION

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

MAX. BUILDING HEIGHT, AS PER SECTION 23-641, (f) Z.R.

MAX BUILDING HT. = 50 - 55FT (R6B) BASE HT. MIN-MAX. = 30 - 45FT.

PROPOSED HEIGHT: MAX. BUILDING HT. = 50FT

AFFORDABLE HOUSING

25% OF FLOOR AREA

25% OF 32,500 SF = 8,125 SF
PROPOSED AFFORDABLE D.U.= 10 D.U. UNITS

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(631)561-5454

BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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PROPOSED FRONT ELEVATION

JOB NUMBER **5D21xxx**

DRAWING NUMBER **A-200.00**

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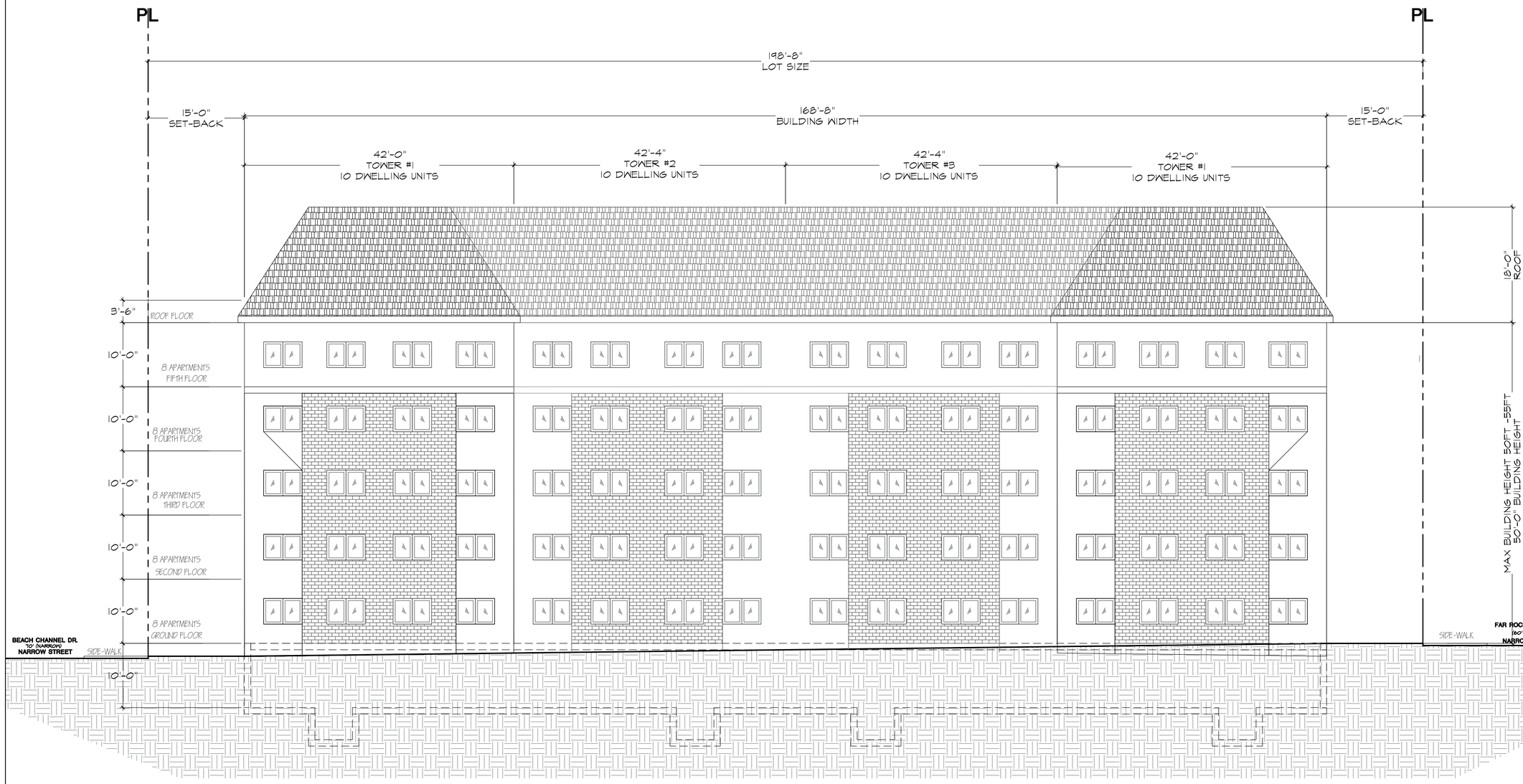

REAR ELEVATION

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

MAX. BUILDING HEIGHT, AS PER SECTION 23-641, (f) Z.R.

MAX BUILDING HT. = 50 - 55FT (R6B) BASE HT. MIN-MAX. = 30 - 45FT.

PROPOSED HEIGHT: MAX. BUILDING HT. = 50FT

AFFORDABLE HOUSING

25% OF FLOOR AREA

25% OF 32,500 SF = 8,125 SF
PROPOSED AFFORDABLE D.U.= 10 D.U. UNITS

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(631)561-5454

BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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DRAWING TITLE

PROPOSED REAR ELEVATION

JOB NUMBER **5D21xxx**

DRAWING NUMBER **A-201.00**

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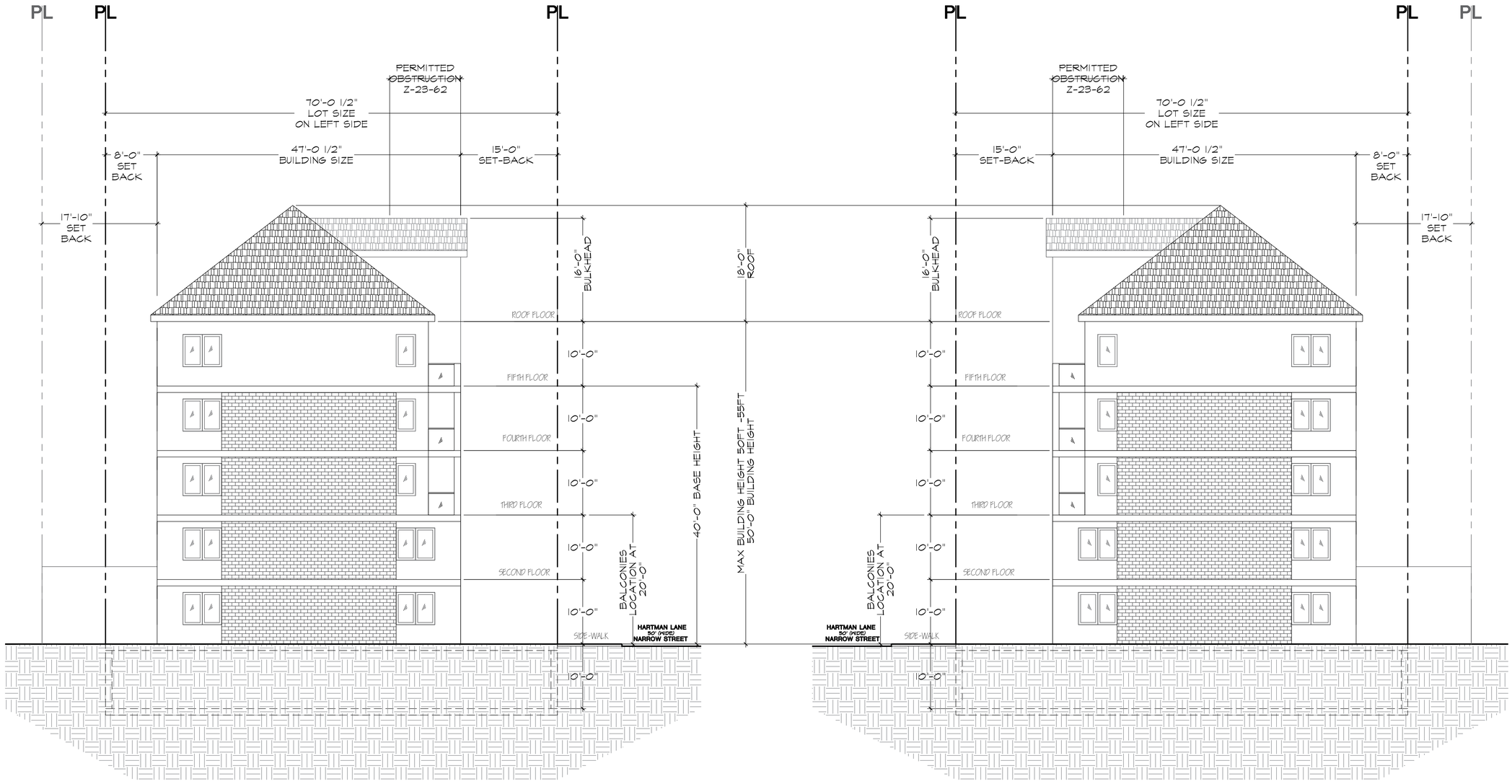

LEFT ELEVATION

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

RIGHT ELEVATION

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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KEITH NICHOLAS STRIGA, AIA
LICENSED ARCHITECT
NEW YORK STATE LICENSE 031197

JACKMAN T PRESCOD, PE
LICENSED STRUCTURAL ENGINEER
NEW YORK STATE LICENSE 091

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DRAWING TITLE

PROPOSED LEFT & RIGHT ELEVATION

JOB NUMBER 5D21xxx

DRAWING NUMBER

A-202.00

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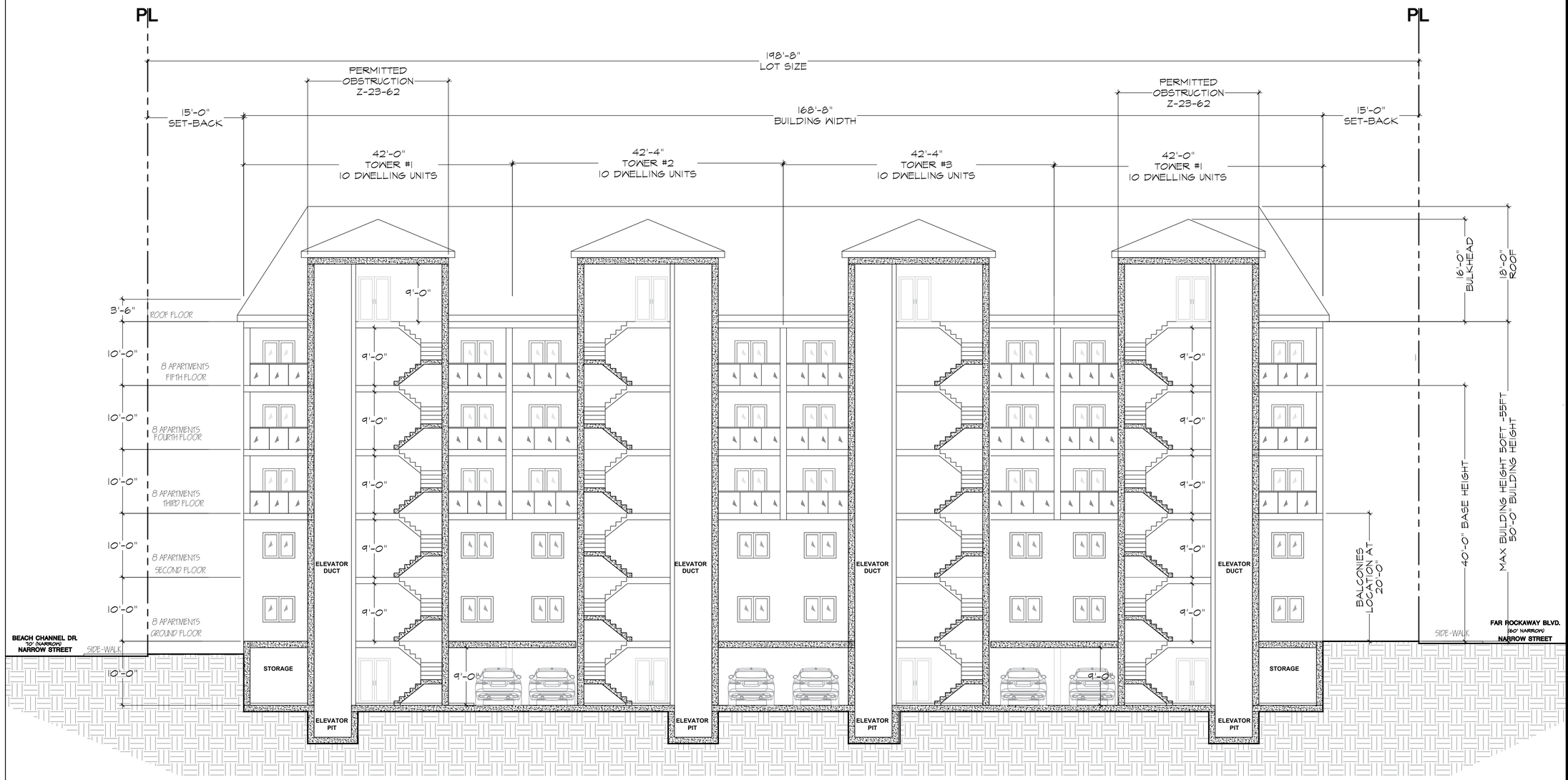
SHEET __ OF __



SECTION A-A'

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

MAX. BUILDING HEIGHT, AS PER SECTION 23-641, (f) Z.R.

MAX BUILDING HT. = 50 - 55FT (R6B) BASE HT. MIN-MAX. = 30 - 45FT.

PROPOSED HEIGHT: MAX. BUILDING HT. = 50FT

AFFORDABLE HOUSING

25% OF FLOOR AREA

25% OF 32,500 SF = 8,125 SF
PROPOSED AFFORDABLE D.U.= 10 D.U. UNITS

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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LICENSED ARCHITECT
No. 026605
STATE OF NEW YORK

JACKMAN J. PRESCOD, PE
LICENSED PROFESSIONAL ENGINEER
No. 095078
STATE OF NEW YORK

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DRAWING TITLE

PROPOSED SECTION A-A

JOB NUMBER
5D21xxx

DRAWING NUMBER
A-300.00

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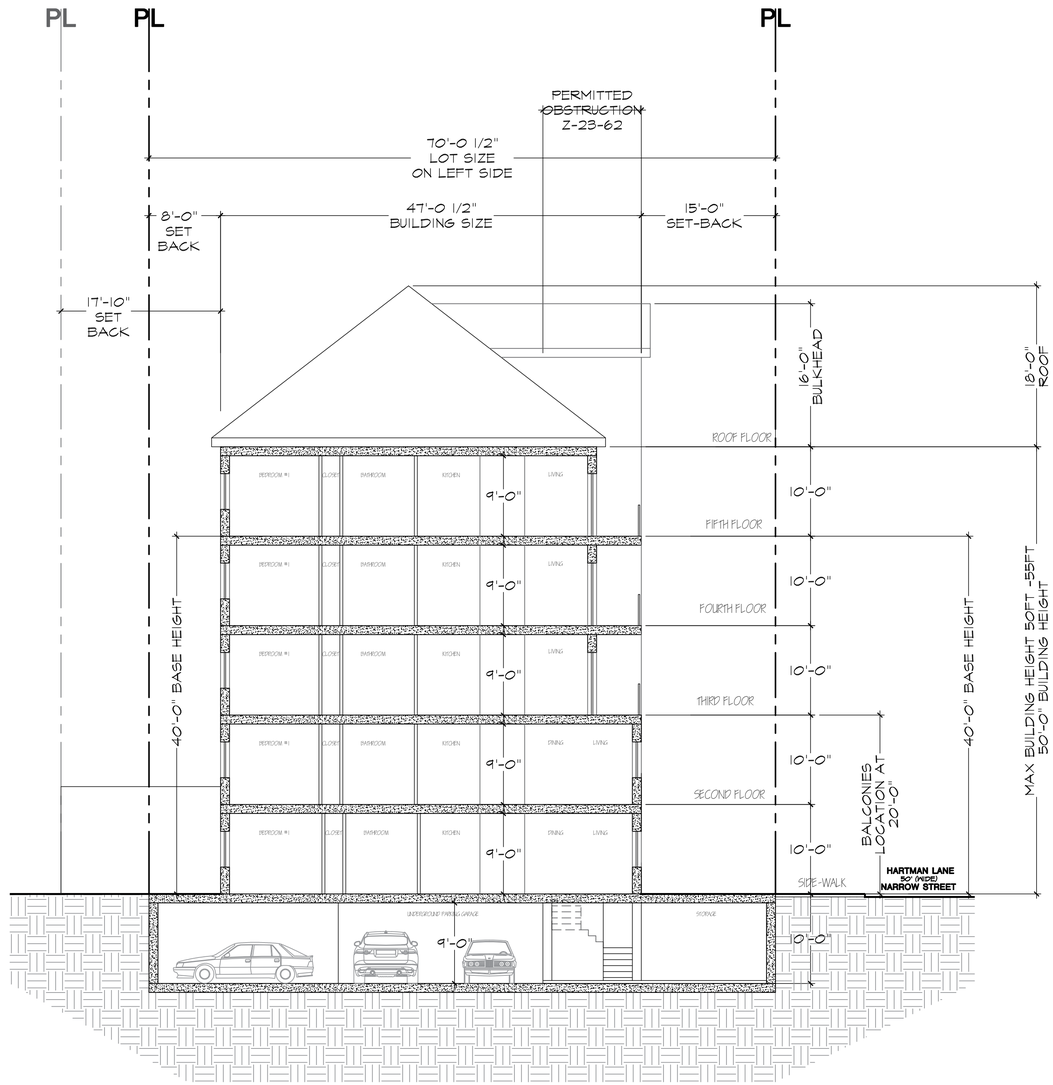

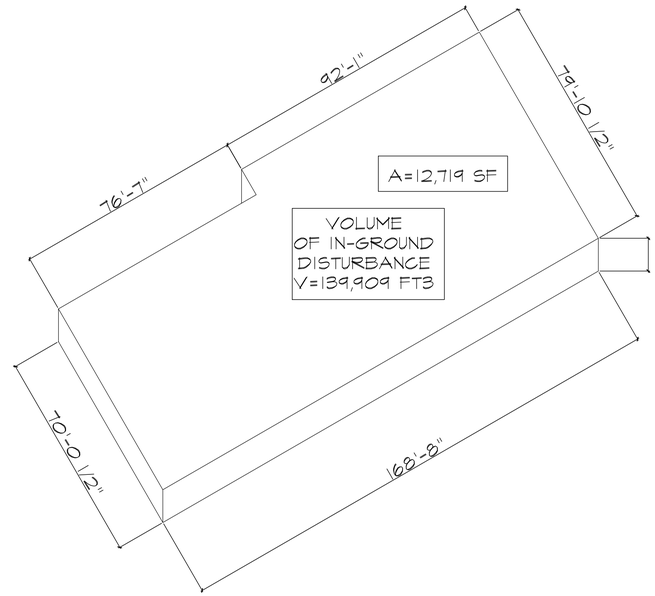

SECTION B-B'

SCALE: 1/8"=1'-0"

0 1/8" 1" 2

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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PROPOSED SECTION B-B

JOB NUMBER 5D21xxx

DRAWING NUMBER

A-301.00

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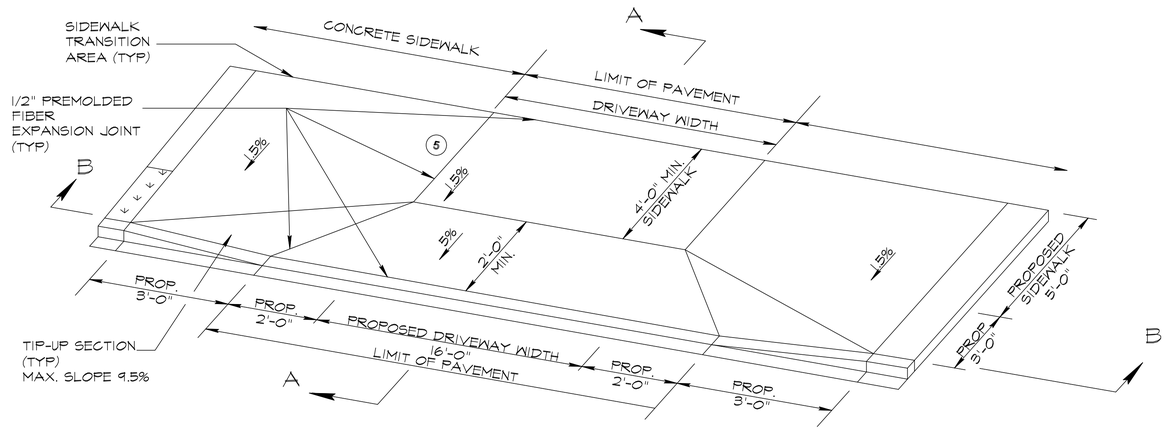
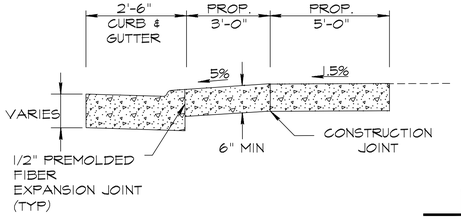
SPLAY CURB CUT DETAIL



CURB CUT DETAIL

SCALE: N.T.S.

0 1" 2



SECTION A-A

SCALE: N.T.S.

0 1" 2

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BUILD. DEP. SUBMISSION 10.04.2022

MARK	DESCRIPTION	DATE

PROJECT NAME

PROPOSED 5 STORY RESIDENTIAL BUILDING

HARTMAN LANE
FAR ROCKAWAY
QUEENS, NY 11691
BLOCK: 15785 LOT: 4 & 55

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KEITH NICHOLAS SITRIGA, AIA

JACKMAN T. PRESCOD, PE

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SPLAY CURB CUT DETAIL

JOB NUMBER 5D21xxx

DRAWING NUMBER

A-400.00

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APPENDIX B

WATERFRONT REVITALIZATION PROGRAM CAF & FLOOD EVALUATION WORKSHEET

FOR INTERNAL USE ONLY	WRP No. 21-016
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Queens Realty Holdings of NY, Ltd.

Name of Applicant Representative: Amber Kartalyan-Equity Environmental Engineering, LLC

Address: 500 International Drive, Suite 150 Mount Olive NJ 07828

Telephone: 201-757-3561 Email: amber.kartalyan@equityenvironmental.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The Applicant is seeking a discretionary action in order to facilitate the redevelopment of a site within the Far Rockaway section of Queens Community District 14. The proposed action is a Zoning Map Amendment to establish an R6B district within an area currently zoned R4-1 consisting of Block 15785, Lot 55, 4 and p/o Lots 7 and 54 and Block 15737, Lots 1 and 10 (the 'Affected Area'), and a Text Change to Map the Affected Area for Mandatory Inclusionary Housing Options 1 and 2. The Affected Area consists of two block fronts on the eastern side of Hartman Lane from Ocean Crest Boulevard in the north to Far Rockaway Boulevard in the south, to a depth of 115 feet on Block 15737, between Ocean Crest Boulevard and Beach Channel Drive, and to a depth of 80 feet between Beach Channel Drive and Far Rockaway Boulevard. In its entirety, the Affected Area comprises approximately 42,540 SF of lot area. The Applicant proposes to develop Block 15785, Lots 4 and 55 (the 'Proposed Development Site') with a 5-story, 50-foot plus cellar residential building, containing approximately 33,096 ZSF with 40 dwelling units, of which 10 are proposed to be permanently affordable under MIH Option1. Additionally, 22 enclosed parking spaces would be provided at cellar level.

2. Purpose of activity

The proposed action would allow for new medium-density residential development at a density and bulk that is appropriate for the site. The proposed development would replace a vacant lot and a lot that contains a vacant structure.

C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 15785, Lots 4 and 55

Street Address: 25-46 Far Rockaway Boulevard

Name of water body (if located on the waterfront): NA

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1.	Does the project require a waterfront site?	☐ Yes	☑ No
2.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?	☐ Yes	☑ No
3.	Is the project located on publicly owned land or receiving public assistance?	☐ Yes	☑ No
4.	Is the project located within a FEMA 1% annual chance floodplain? *(6.2)*	☐ Yes	☑ No
5.	Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)*	☐ Yes	☑ No
6.	Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).*	☐ Yes	☑ No

- ☐ Significant Maritime and Industrial Area (SMIA) *(2.1)*
- ☐ Special Natural Waterfront Area (SNWA) *(4.1)*
- ☐ Priority Maritime Activity Zone (PMAZ) *(3.5)*
- ☐ Recognized Ecological Complex (REC) *(4.4)*
- ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) *(2.2, 4.2)*

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☑
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Amber Kartalyan - Equity Environmental Engineering, LLC

Address: 500 International Drive, Suite 150 Mount Olive NJ 07828

Telephone: 201-757-3561 Email: amber.kartalyan@equityenvironmental.co

Applicant/Agent's Signature: Amber Kartalyan Digitally signed by Amber Kartalyan Date: 2022.07.06 13:53:18 -04'00'

Date: 7/6/22

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☑ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☑ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☑ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp

Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	25-46 Far Rockaway Rezoning
Location	25-46 Far Rockaway Boulevard, Queens - Block 15785, Lots 4 and 5
Type(s)	☑ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☐ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Drainage ☐ Coastal Protection
Description	The Applicant proposes to develop Block 15785, Lots 4 and 55 (the 'Proposed Development') with a 5-story, 50 Ft tall plus cellar residential building, containing approximately 33,096 zoning square feet (ZSF) with 40 dwelling units on a combined 15,044 sf lot. Additionally, 22 enclosed parking spaces would be provided at cellar level, 13,490 gross square foot (GSF) parking garage.
Planned Completion Date	2024
Expected Project Lifespan	100 Years

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	2.43	**2.43**	**NAVD88**	*Beach Channel Station adjusted*
1% flood height	10.00	**10.00**	**NAVD88**	*Nearest 2015 PFIRMs 1% flood height*
Design flood elevation	11.00	**11.00**	**NAVD88**	*DFE +1'*
As relevant:				
0.2% flood height	-->			

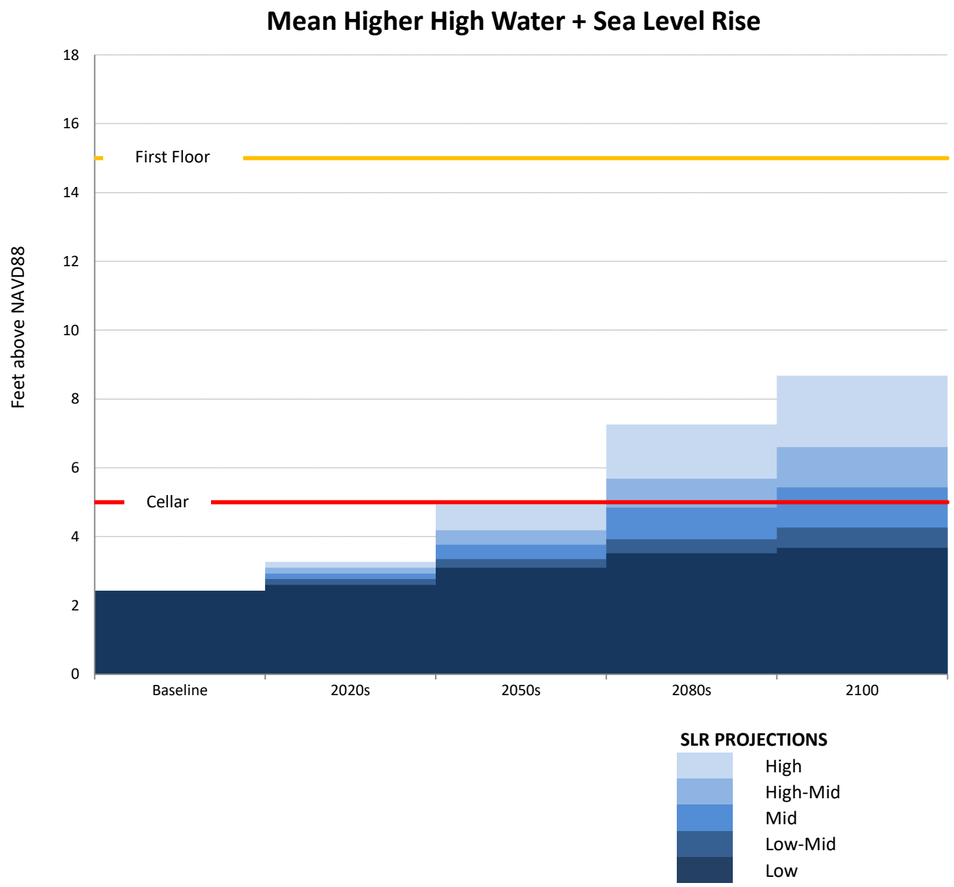
Data will be converted based on the following datums:

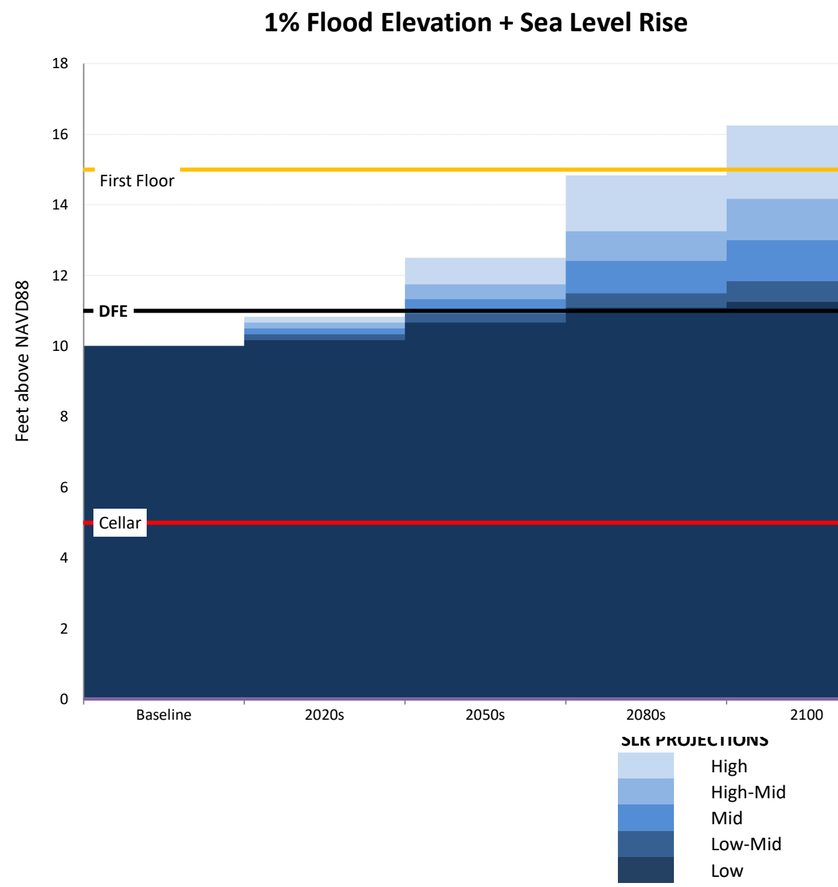
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

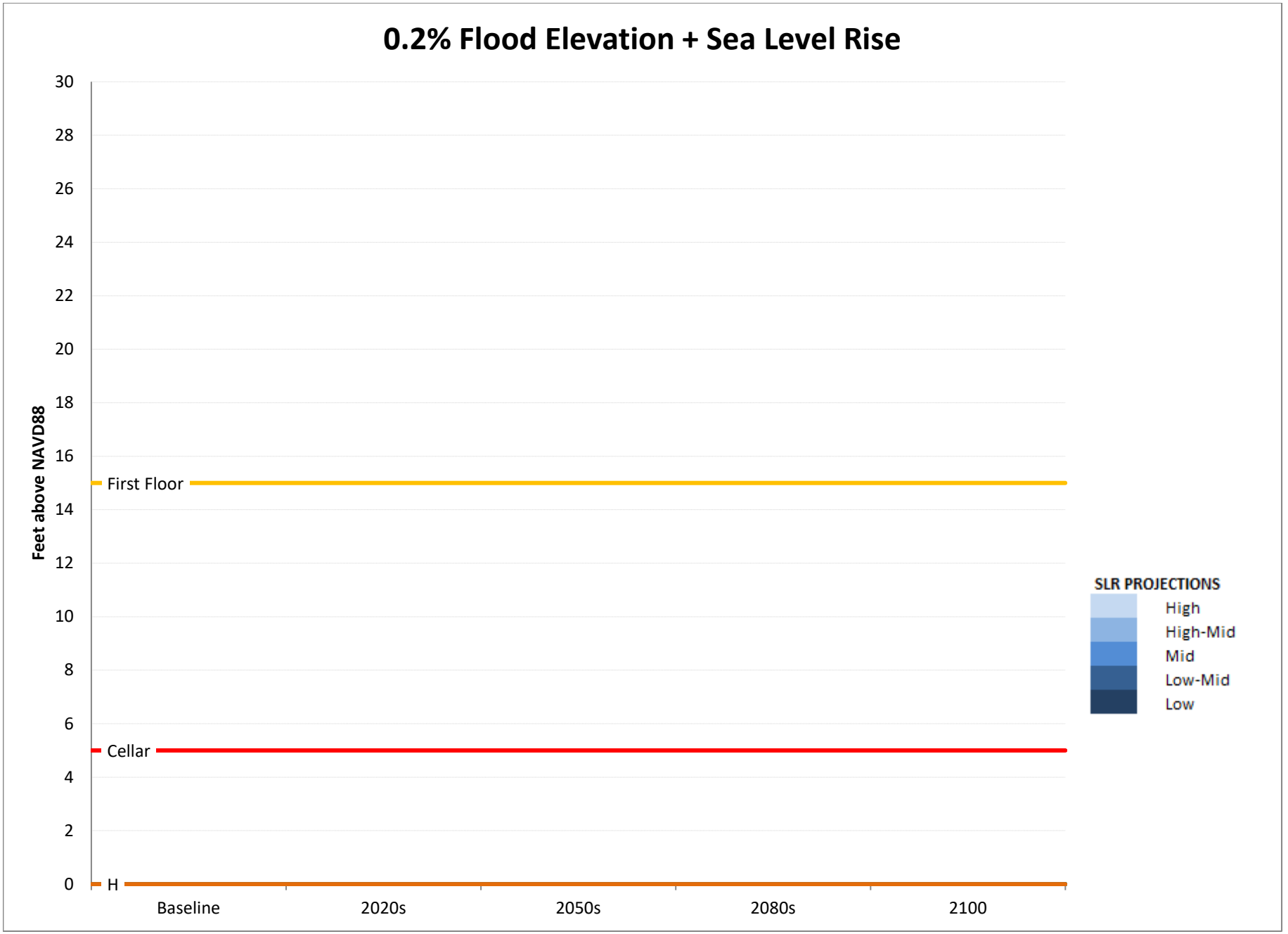
Describe key physical features of the project.

Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Cellar	☑ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other	100 Years	5.0	Feet	NAVD88	*5.0*	*5.0*	*2.6*	*#VALUE!*
Parking and parking elevators (2), and elevator pits									
First Floor	☑ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other	100 Years	15.0	Feet	NAVD88	*15.0*	*15.0*	*12.6*	*#VALUE!*
Residentials Dus and parking elevators									
C	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
D	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
E	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
F	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
G	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	☐ Vulnerable ☐ Critical ☑ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									

Assess project vulnerability over a range of sea level rise projections.






0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
First Floor
Cellar
H
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

	SLR (ft)					
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**	
Baseline	0.00	0.00	0.00	0.00	0.00	**2014**
2020s	0.17	0.33	0.50	0.67	0.83	**2020s**
2050s	0.67	0.92	1.33	1.75	2.50	**2050s**
2080s	1.08	1.50	2.42	3.25	4.83	**2080s**
2100	1.25	1.83	3.00	4.17	6.25	**2100**

	MHHW+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	2.43	2.43	2.43	2.43	2.43
2020s	2.60	2.76	2.93	3.10	3.26
2050s	3.10	3.35	3.76	4.18	4.93
2080s	3.51	3.93	4.85	5.68	7.26
2100	3.68	4.26	5.43	6.60	8.68

	1%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	10.00	10.00	10.00	10.00	10.00
2020s	10.17	10.33	10.50	10.67	10.83
2050s	10.67	10.92	11.33	11.75	12.50
2080s	11.08	11.50	12.42	13.25	14.83
2100	11.25	11.83	13.00	14.17	16.25

	0.2%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2020s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2050s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2080s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2100	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

	0	1
Cellar	5	5
First Floor	15	15
C	0	0
D	0	0
E	0	0
F	0	0
G	0	0
H	0	0
DFE	11.00	11.00

SLR (in)				
Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
0	0	0	0	0
2	4	6	8	10
8	11	16	21	30
13	18	29	39	58
15	22	36	50	75

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willets Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-200

Source
NOAA Ti
NOAA Ti
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NOAA VI
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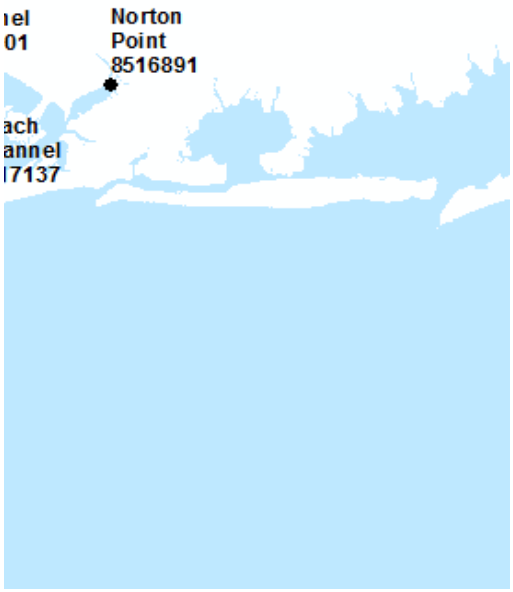
)1 tidal e




New
Rochelle
8518490
Glen Cove
8516614
Willets
Point
8516990


Norton
Point
8516891

APPENDIX C

LPC CORRESPONDENCE

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-Q
Project:
Date received: 12/6/2018

Properties with no Architectural or Archaeological significance:
1) ADDRESS: 25-46 FAR ROCKAWAY BLVD, BBL: 4157850055
2) ADDRESS: 25-47 BEACH CHANNEL DRIVE, BBL: 4157850004
3) ADDRESS: 25-40 BEACH CHANNEL DRIVE, BBL: 4157370001



12/11/2018

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 33861_FSO_DNP_12112018.doc

APPENDIX D

JAMAICA BAY WATERSHED PROTECTION PLAN FORM

Print Form

Jamaica Bay Watershed Protection Plan
Project Tracking Form

The Jamaica Bay Watershed Protection Plan, developed pursuant to Local Law 71 of 2005, mandates that the New York City Department of Environmental Protection (DEP) work with the Mayor's Office of Environmental Coordination (MOEC) to review and track proposed development projects in the Jamaica Bay Watershed (http://www.nyc.gov/html/oec/downloads/pdf/ceqr/Jamaica_Bay_Watershed_Map.jpg) that are subject to CEQR in order to monitor growth and trends. If a project is located in the Jamaica Bay Watershed, (the applicant should complete this form and submit it to DEP and MOEC. This form must be updated with any project modifications and resubmitted to DEP and MOEC.

The information below will be used for tracking purposes only. It is not intended to indicate whether further CEQR analysis is needed to substitute for the guidance offered in the relevant chapters of the CEQR Technical Manual.

A. GENERAL PROJECT INFORMATION

1. CEQR Number: 2018Q0198 1a. Modification ☐
2. Project Name: Far Rockaway Boulevad Rezoning
3. Project Description:

The Applicant proposes to rezone the Affected Area in Queens Community District 14 from R4-1 to R6B. The Proposed Action would allow for 48 multi-family housing units. The Projected Development Sites are corner lots with frontage on Hartman Lane, Far Rockaway Boulevard and Beach Channel Drive.

4. Project Sponsor: Isaiah Moultrie
5. Required approvals: Zoning Map Amendment
6. Project schedule (build year and construction schedule): 2024

B. PROJECT LOCATION:

1. Street address: 25-46 Far Rockaway Boulevard
2. Tax block(s): 15785 & 15737 Tax Lot(s): 55, 4 p/o 7 & 54. 1 & 10
3. Identify existing land use and zoning on the project site: R4-1, vacant residential
4. Identify proposed land use and zoning on the project site: R6B, multi-family residential
5. Identify land use of adjacent sites (include any open space): residential and school facility
6. Describe existing density on the project site and the proposed density:

Existing Condition	Proposed Condition
vacant lot and vacant 3-story structure	48 residential units (41,107 gsf

7. Is project within 100 or 500 year floodplain (specify)? ☐ **100 Year** ☐ **500 Year** ☒ **No**

C. GROUND AND GROUNDWATER

1. Total area of in-ground disturbance, if any (in square feet): 437,694 cubic square feet
2. Will soil be removed (if so, what is the volume in cubic yards)? approx. 4,815
3. Subsurface soil classification:
   (per the New York City Soil and Water Conservation Board):
4. If project would change site grade, provide land contours (**attach** map showing existing in 1' contours and proposed in 1' contours).
5. Will groundwater be used (list volumes/rates)? ☐ **Yes** ☒ **No**

   Volumes: Rates:
6. Will project involve dewatering (list volumes/rates)? ☐ **Yes** ☒ **No**

   Volumes: Rates:
7. Describe site elevation above seasonal high groundwater:

D. HABITAT

1. Will vegetation be removed, particularly native vegetation? ☐ **Yes** ☒ **No**

   If YES,
   - **Attach** a detailed list (species, size and location on site) of vegetation to be removed (including trees >2" caliper, shrubs, understory planting and groundcover).
   - **List** species to remain on site.
   - **Provide** a detailed list (species and sizes) of proposed landscape restoration plan (including any wetland restoration plans).
2. Is the site used or inhabited by any rare, threatened or endangered species? ☐ **Yes** ☒ **No**
3. Will the project affect habitat characteristics? ☐ **Yes** ☒ **No**

   If YES, describe existing wildlife use and habitat classification using "Ecological Communities of New York State." at http://www.dec.ny.gov/animals/29392.html.
4. Will pesticides, rodenticides or herbicides be used during construction? ☐ **Yes** ☒ **No**

   If YES, estimate quantity, area and duration of application.
5. Will additional lighting be installed? ☒ **Yes** ☐ **No**

   If YES and near existing open space or natural areas, what measures would be taken to reduce light penetration into these areas?

   Site is not near existing open space or natural areas

E. SURFACE COVERAGE AND CHARACTERISTICS

(describe the following for both the existing and proposed condition):

	Existing Condition	Proposed Condition
1. ***Surface area:***		
Roof:	approx. 3,000	approx. 8,000
Pavement/walkway:	approx 500	approx. 2,000
Grass/softscape:	approx. 5,000	approx. 3,000
Other (describe):	vacant lot approx. 4,629	
2. ***Wetland*** (regulated or non-regulated) area and classification:	n/a	n/a
3. ***Water surface area:***	n/a	n/a

4. ***Stormwater management*** (describe):

Existing – how is the site drained?

combined city sewers

Proposed – describe, including any infrastructure improvements necessary off-site:

combined city sewers

APPENDIX E

PHASE I ESA

Phase I Environmental
Site Assessment Report

25-46 Far Rockaway Boulevard
25-46 Far Rockaway Boulevard
Far Rockaway, NY 11691

Prepared for

Queens Realty Holdings LLC.
22-79 Mott Avenue
Queens, NY

Prepared by

Equity Environmental Engineering
500 International Drive
Mount Olive, NJ 07828
Phone: 973-527-7451

Job Number: 2018080
12/19/2018

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1.0 GENERAL INFORMATION

Project Information:
25-46 Far Rockaway Boulevard
Project Number:
2018080

Consultant Information:
Equity Environmental Engineering
500 International Drive
Mount Olive, NJ 07828
Phone: 973-527-7451
Fax: 973-858-0280
E-mail Address: bob.jackson@equityenvironmental.com
Inspection Date: 12/03/2018
Report Date: 12/19/2018

Site Information:
25-46 Far Rockaway Boulevard
25-46 Far Rockaway Boulevard
Far Rockaway, NY 11691
Latitude, Longitude: 40.599629, -73.763507
Site Access Contact: Isaiah Moultrie

Client Information:
Queens Realty Holdings LLC.
Isaiah Moultrie
22-79 Mott Avenue
Queens, NY

Site Assessor



John Vrabel

Senior Reviewer



Robert L. Jackson
Managing Director

Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Robert L. Jackson - Managing Director

2.0 EXECUTIVE SUMMARY

2.1 Subject Property Description

The Subject Property consists of 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive, Queens NY, Block 15785, Lot 55 and Lot 4 respectively. The Subject Property is located in Queens Community District 14 within an R4-1 zoning district. Lot 55 is approximately 8,570 square feet and is currently developed with an approximately 4,968 square foot three-story residential building. Lot 4 is approximately 4,629 square feet and is currently a vacant lot. The Site Location Map is located in Appendix A and Site Photographs are located in Appendix B.

2.2 Data Gaps

Equity did not identify any significant data gaps that would affect its ability to identify Recognized Environmental Conditions (RECs) associated with the Subject Property.

2.3 Environmental Report Summary

Report Section		No Further Action	REC	HREC	CREC	Issue/Further Investigation	Comments
4.4	**Current Use of Property**	X					
4.6	**Adjoining Property Information**	X					
6.1	**Standard Environmental Records Sources**	X					
6.4.1	**Historical Summary**	X					
6.4.7	**Other Environmental Reports**	X					
7.3.1	**Hazardous Substances**	X					
7.3.2	**Petroleum Products**	X					
7.3.3	**USTs**	X					
7.3.4	**ASTs**	X					
7.3.5	**Other Suspect Containers**	X					
7.3.6	**Equipment Likely to Contain PCBs**	X					
7.3.7	**Interior Staining/Corrosion**	X					
7.3.8	**Discharge Features**	X					
7.3.9	**Pits, Ponds, And Lagoons**	X					
7.3.10	**Solid Waste Dumping/Landfills**	X					
7.3.11	**Stained Soil/Stressed Vegetation**	X					
7.3.12	**Wells**	X					

2.4 Recommendations

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release or a material threat of a release into structures on the properties or into the ground, groundwater, or surface waters of the properties. Historic Recognized Environmental Conditions (HRECs) are RECs previously remediated to government standards. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. Controlled Recognized Environmental Conditions (CRECs) are RECs that are under some form of institutional and/or engineering control. A Vapor Encroachment Condition (VEC) is the presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property. All RECs and VECs are discussed below.

Equity performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 at the Subject Property. Any exceptions to, or deviations from, this practice are described in Section 3.5 of this report. This assessment has revealed the following information in connection with the Subject Property:

RECs:

2.4 Recommendations (continued)

There are no RECs associated with the Subject Property.

HRECs:

There are no HRECs associated with the Subject Property.

CRECs:

There are no CRECs associated with the Subject Property.

VECs:

The EDR Vapor Encroachment database identified two VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are related a leaking tank and a spill of #2 heating oil. Based on these findings, a possible vapor encroachment cannot be ruled out.

3.0 INTRODUCTION

3.1 Purpose

The purpose of the Phase I Environmental Site Assessment (ESA) was to evaluate the current and historical conditions of the Subject Property in an effort to identify recognized environmental conditions in connection with the Subject Property.

A recognized environmental condition is defined by ASTM as:
Recognized Environmental Condition - The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to release to the environment; under conditions indicative of a release to the environment; or conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

The identification of recognized environmental conditions in connection with the subject property may impose an environmental liability on owners or operators of the site, reduce the value of the site, or restrict the use or marketability of the site, and therefore, further investigation may be warranted to evaluate the scope and extent of potential environmental liabilities.

3.2 Scope of Work

The Phase I ESA conducted at the Subject Property was in general accordance with ASTM Standard E 1527-13 and included the following:

- Review of previous environmental site assessments;
- Records review;
- Interviews with regulatory officials and personnel associated with the subject and adjoining properties;
- A site visit; and
- Evaluation of information and preparation of the report provided herein.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-13 standard were made.

3.3 Significant Assumptions

Equity has prepared this Phase I ESA report in accordance with the contractual scope of work, using reasonable efforts to attempt to identify RECs. The conclusions presented in this report are based solely on visual observations, readily available records, interviews, and other secondary sources, which are assumed accurate unless otherwise noted. Equity does not warrant the accuracy or completeness of the information provided by secondary sources. Equity does not warrant that contamination that may exist on the site has been discovered, that the site is suitable for any particular purpose, or that the site is clear and free of liability. This report is intended for use in its entirety. No excerpts may be taken to be representative of the findings of this assessment. Opinions and recommendations presented in this report apply to the site conditions and features, as they existed at the time of the site visit, and those reasonably foreseeable. They cannot necessarily apply to conditions and features of which Equity is unaware and has not had an opportunity to evaluate.

3.4 Limitations and Exceptions

Along with all of the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report may be limited by the following: access limitations, physical obstructions to observations, outstanding information requests, and historical data source failure.

It should be noted that this assessment did not include a review or audit of operational environmental compliance issues, or of any environmental management systems (EMS) that may exist on the property. Where required, the documents listed in Appendices A and E were used as reference material for the completion of the Phase I ESA. Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, Equity in certain instances has been required to assume that the information provided is accurate.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work

3.4 Limitations and Exceptions (continued)

was performed. The conclusions and recommendations presented represent the best judgment of Equity based on the data obtained from the work. Due to the nature of investigation and the limited data available, Equity cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

3.5 Deviations

This Phase I Environmental Assessment did not deviate from the recommended scope of ASTM Standard E 1527-13.

3.6 Special Terms and Conditions

Authorization to perform this assessment was given by the client on December 3, 2018. Instructions as to the location of the property, access, and an explanation of the property and facilities to be assessed were provided by Mr. Moultrie.

3.7 Reliance

This report has been prepared for the sole benefit of Mr. Isaiah Moultrie. The report may not be relied upon by any other person or entity without the express written consent of Mr. Isaiah Moultrie with Queens Realty Holdings LTD.

4.0 SITE DESCRIPTION

4.1 Location and Legal Description

The Subject Property consists of 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive, Queens NY, Block 15785, Lot 55 and Lot 4 respectively. The Subject Property is located in Queens Community District 14 within an R4-1 zoning district. Lot 55 is approximately 8,570 square feet and is currently developed with an approximately 4,968 square foot three-story residential building. Lot 4 is approximately 4,629 square feet and is currently a vacant lot.

4.2 Activity/Use Limitations

Equity has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Subject Property located at, 25-46 Far Rockaway Blvd and 25-47 Beach Channel Drive, Queens, NY 11101. Any exceptions to or deletions from this practice are described in Section 2.5 of this report. This assessment has revealed no evidence of Recognized Environmental Conditions in connection with the property.

4.3 Site and Vicinity Description

The Subject Property consists of 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive, Queens NY, Block 15785, Lot 55 and Lot 4 respectively. Lot 55 is 8,570 square foot and is developed with a 4,968 square foot. Lot 4 is 4,629 square foot and is vacant. The ground surface at the Subject Property is approximately five feet above street level and slopes downward to the north east. Ground cover consists primarily of concrete sidewalk, a small driveway cut out, the building, and vegetated soil, around the building on Lot 55. Lot 4 is overgrown with vegetation. The Subject Property can be accessed from Far Rockaway Boulevard, Hartman Lane, and Beach Channel Drive. The surrounding area consists of residential housing.

4.4 Current Use of Property

At the time of the Phase I site reconnaissance, the 3 story residential building on Lot 55 was vacant. Lot 4 is a vacant property with no development.

4.5 Description of Structures and Other Improvements

There is one building on Lot 55. The 4,968 gross square foot building has three floors. The interior is vacant and entirely demolished. All that is left of the building is the frame and exterior siding. The building of wood and masonry construction. Lot 4 is vacant lot.

New York City supplies drinking water to the Subject Property from the municipal distribution system. Sanitary discharges on the Subject Property are discharged into the municipal sanitary sewer system. Electricity is provided by Public Service Enterprise Group and Natural Gas is provided to the Subject Property by National Grid.

4.6 Adjoining Property Information

During the site reconnaissance, Equity observed that the land in the immediate vicinity of the Subject Property is residential.

5.0 USER PROVIDED INFORMATION

5.1 Specialized Knowledge

Equity has no specialized knowledge of the Subject Property outside of the research which was conducted and reported as part of this report. The property ownership as well as all individuals who were interviewed as part of this investigation, have not reported any specialized knowledge of this Subject Property outside of what is contained in this report.

5.2 Valuation Reduction for Environmental Issues

Equity has not been provided with an appraisal for the Subject Property. An active Department of Buildings violation for an unsafe building could potentially lower the value of the Subject Property.

5.3 Owner, Property Manager, and Occupant Information

No written or verbal communication with the property owner revealed any information which suggested that there are currently or historically any recognized environmental conditions associated with the Subject Property.

5.4 Reason For Performing Phase I ESA

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E 1527-13) in connection with the Subject Property. Equity understands that the findings of this study will be used to evaluate a pending financial transaction in connection with the Subject Property. The Phase I ESA is being conducted as part of environmental due diligence prior to variances and zoning changes for proposed new construction.

6.0 RECORDS REVIEW

6.1 Standard Environmental Records Sources

Equity contracted Environmental Data Resources, Inc. (EDR) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property. Copies of the EDR research data and a description of the databases are included in Appendix D of this report.

The Target Property (TP) for this database search was 25-46 Far Rockaway Boulevard Block 15785, Lot 55. The NR designation on the table stands for "Not Requested" at this search distance. The TP is not listed in any databases.

Map Findings Summary

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RCRA-LQG		0.25	0	1	NR	NR	NR	1
RCRA-SQG		0.25	1	1	NR	NR	NR	2
RCRA-CESQG		0.25	0	1	NR	NR	NR	1
RCRA NonGen / NLR		0.25	1	1	NR	NR	NR	2
NY MANIFEST		0.25	2	3	NR	NR	NR	5
NY LTANKS		0.5	1	2	4	NR	NR	7
NY SPILLS		0.125	5	NR	NR	NR	NR	5
NJ MANIFEST		0.25	1	1	NR	NR	NR	2
NY UST		0.25	2	4	NR	NR	NR	6
NY AST		0.25	2	3	NR	NR	NR	5
NY BROWNFIELDS		0.5	0	1	0	NR	NR	1
NY INST CONTROL		0.5	0	1	0	NR	NR	1
NY ENG CONTROLS		0.5	0	1	0	NR	NR	1

6.2 Additional Environmental Record Sources

No additional environmental record sources were researched for this Phase I investigation.

6.3 General Site Setting

The Subject Property is located in the Queens (Borough 4) and surrounded by residential land use. The ground surface at the Subject Property is approximately five feet above street level and slopes downward to the north east. The general area surrounding the Subject Property is flat with little topographic relief.

6.3.1 Topography

Topographical location of the Subject Property is approximately Latitude of 40.599629, Longitude of -73.763507 at an elevation of 11 feet above sea level. Based on a review of the 2013 USGS 7.5-minute Central Park Quadrangle, NY topographic map for the site area. Groundwater is inferred to flow to the south south west toward Jamaica Bay.

6.3.2 Surface Water Bodies

The nearest surface water in the vicinity of the Property is Jamaica Bay located approximately 2,200 feet to the west of the Subject Property. No surface water is located on the Subject Property.

6.3.3 Geology and Hydrology

Based on the soil survey maps published by the USDA Soil Conservation Service (1994) and information provided in the EDR Report, the subsurface soils expected at the site include Urban Land, which is variable in texture and does not qualify as hydric soil. Urban land soils are those which have lost original characteristics due to human activity (construction, development, demolition, debris, etc.). The geologic age identification of the rock at the Subject Property is

6.3.3 Geology and Hydrology (continued)

the Stratified Sequence, and the rock-stratigraphic units are made up of the Cenozoic Era, Quaternary System, Pleistocene Series (Code Qp).

The Subject Property is located within the 36059C0282G FEMA Flood Plain Panel. Ground water is inferred to flow toward the west from the Property. No on-site water wells or springs were observed during the Property reconnaissance. The nearest surface water in the vicinity of the Subject Property is Jamaica Bay, 2,200 feet from the subject property. No settling ponds, lagoons, surface impoundments, wetlands or catch basins were observed at the Subject Property during this assessment.

6.4 Historical Use

6.4.1 Historical Summary

Historical information identifying the past site use was obtained from a variety of sources as detailed in Appendix C of this report and included: City Directories, Aerial Photographs, Sanborn Fire Insurance Maps, and Topographic Maps.

Source Reviewed	Date(s)	Source Details
Historic Topographic Maps	2013-1897	Appendix C
Aerial Topographic Maps	2017-1924	Appendix C
Sandborn Fire Insurance Maps	2006-1901	Appendix C
City Directory	2005-1934	Appendix C

6.4.2 Title Records

Equity was not provided land title records as part of this assessment.

6.4.3 City Directories

Business directories including city, cross reference, and telephone directories were reviewed for the years spanning 1934 through 2005. The subject property was listed historically as a residential site.

6.4.4 Aerial Photos

Equity reviewed a total of thirteen aerial photographs spanning from 1924 to 2017. The Subject Property depicted in the aerials from 1924 to 2017 is consistent with the current shape, size, and location of the Subject Property.

6.4.5 Sanborn/Historical Maps

Equity reviewed a total of twenty six Sanborn Fire Insurance maps from 1901 to 2006. The table below summarizes the observations made based on the maps provided by EDR. The Sanborn maps are located in Appendix C.

Summary

Date(s)	Property Comments	Surrounding Area Comments
1901	The Subject Property is developed with a residential dwelling unit.	The surrounding area consists predominantly of residential dwelling units.
1912, 1933, 1951, 1981, 1983, 1985, 1986, 1987, 1988, 1990, 1991, 1992, 1993, 1995, 1996, 1999, 2001, 2002, 2003, 2004, 2005, 2006	The Subject Property is developed with two residential dwelling units.	The surrounding area consists predominantly of residential dwelling units.

6.4.6 Historical Topographic Maps

Equity reviewed a total of seven historical topographic maps from 1897 to 2013, No discernible information could be obtained from these maps. The topographic maps are provided in Appendix C

6.4.7 Other Environmental Reports

No other environmental reports were obtained or reviewed for this assessment.

6.4.8 Building Department Records

According to the New York City Department of Buildings (DOB) website, 25-46 Far Rockaway Boulevard has a total of three complaints and one violation. All of the complaints have been resolved. The violation for an Unsafe Building is still active.

According to the New York City Department of Buildings (DOB) website, 25-47 Beach Channel Drive has a total of three complaints and two violations. All of the complaints have been resolved. The Violations for an Unsafe Building and Immediate Emergency is still active.

6.5 Environmental Liens and Activity/Use Limitations

There are no known liens and/or activity/use limitations on the Subject Property.

7.0 SITE RECONNAISSANCE

7.1 Methodology and Limiting Conditions

The site reconnaissance was conducted on 12/3/18 by John Vrabel, Project Scientist with Equity, accompanied by Mr. Moultrie and Ericka Moorer. Weather conditions at the time of the site reconnaissance were 45 degrees and cloudy. The visual reconnaissance consisted of observing the boundaries of the property and systematically traversing the site to provide an overlapping field of view, wherever possible. The periphery of the on-site structure was observed along with interior accessible common areas. Photographs of pertinent site features identified during the site reconnaissance are included in Appendix B.

7.2 General Site Setting

The Subject Property consists of 25-46 Far Rockaway Boulevard and 25-47 Beach Channel Drive, Queens NY, Block 15785, Lot 55 and Lot 4 respectively. Lot 55 is 8,570 square foot and is developed with a 4,968 square foot. Lot 4 is 4,629 square foot and is vacant. The ground surface at the Subject Property is generally flat. Ground cover consists primarily of concrete sidewalk, a small driveway cut out, the building, and vegetated soil, around the building on Lot 55. Lot 4 is overgrown with vegetation. The Subject Property can be accessed from Far Rockaway Boulevard, Hartman Lane, and Beach Channel Drive. The surrounding area consists of residential housing.

7.3 Site Visit Findings

7.3.1 Hazardous Substances

No hazardous substances were observed during the site reconnaissance.

7.3.2 Petroleum Products

No petroleum products were observed during the site reconnaissance.

7.3.3 USTs

No underground storage tanks (USTs) were observed during the site reconnaissance.

7.3.4 ASTs

No above ground storage tanks (ASTs) were observed during the site reconnaissance.

7.3.5 Other Suspect Containers

No other suspect containers were observed during the site reconnaissance.

7.3.6 Equipment Likely to Contain PCBs

No equipment likely to contain PCBs was observed during the site reconnaissance.

7.3.7 Interior Staining/Corrosion

No interior staining was identified during the site reconnaissance.

7.3.8 Discharge Features

No discharge features were observed during the site reconnaissance.

7.3.9 Pits, Ponds, And Lagoons

No pits, ponds, or lagoons were observed during the site reconnaissance.

7.3.10 Solid Waste Dumping/Landfills

No solid waste dumping/landfills were observed during the site reconnaissance.

7.3.11 Stained Soil/Stressed Vegetation

No stained soil or stressed vegetation was observed during the site reconnaissance.

7.3.12 Wells

No wells were observed during the site reconnaissance.

8.0 INTERVIEWS

Equity conducted a interview with the Subject Property owner, Mr. Moultrie during the site visit on December 3rd, 2018. Mr. Moultrie was able to provide specific information about the Subject Property such as building year, square footage, and utility providers. No other information was obtained during this interview.

CONCLUSIONS

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release or a material threat of a release into structures on the properties or into the ground, groundwater, or surface waters of the properties. Historic Recognized Environmental Conditions (HRECs) are RECs previously remediated to government standards. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. Controlled Recognized Environmental Conditions (CRECs) are RECs that are under some form of institutional and/or engineering control. A Vapor Encroachment Condition (VEC) is the presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property. All RECs and VECs are discussed below.

Equity performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 at the Subject Property. Any exceptions to, or deviations from, this practice are described in Section 3.5 of this report. This assessment has revealed the following information in connection with the Subject Property:

RECs:

There are no RECs associated with the Subject Property.

HRECs:

There are no HRECs associated with the Subject Property.

CRECs:

There are no CRECs associated with the Subject Property.

VECs:

The EDR Vapor Encroachment database identified two VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are related a leaking tank and a spill of #2 heating oil. Based on these findings, a possible vapor encroachment cannot be ruled out.

REFERENCES

The following references were used in the preparation of this report:

1. EDR Environmental Databases
2. Aerial Photographs
3. City Directories
4. Historic Topographic Maps
5. Sanborn Maps
6. NYC Zola Database
7. NYC Department of Buildings records
8. Qualifications

APPENDIX F

NOISE BACKUP DATA

12/3/18 Rockaway Beach Noise (Multiple Sites)

nel: JV, JW, NL

e: Noise

t: 5:00

me: 7:30

meter calibrated before + after each use

tion: #1, 22-79 Mott Ave (LARSON DAVIS)

r #: 0220233 calibrator #: 6755

ic Counts:

	Am	Mid-day	Evening
	320	138	216
	391	198	252
K	18	5	10
	11	6	8

tion: 2 25-46 Far Rockaway Blvd (Railway)

r #: 4274806 calibrator #: 44758708

ic Counts:

	Am	Mid-day	Evening
	8	7	8

Location: 1 25-46 Far Rockaway Blvd

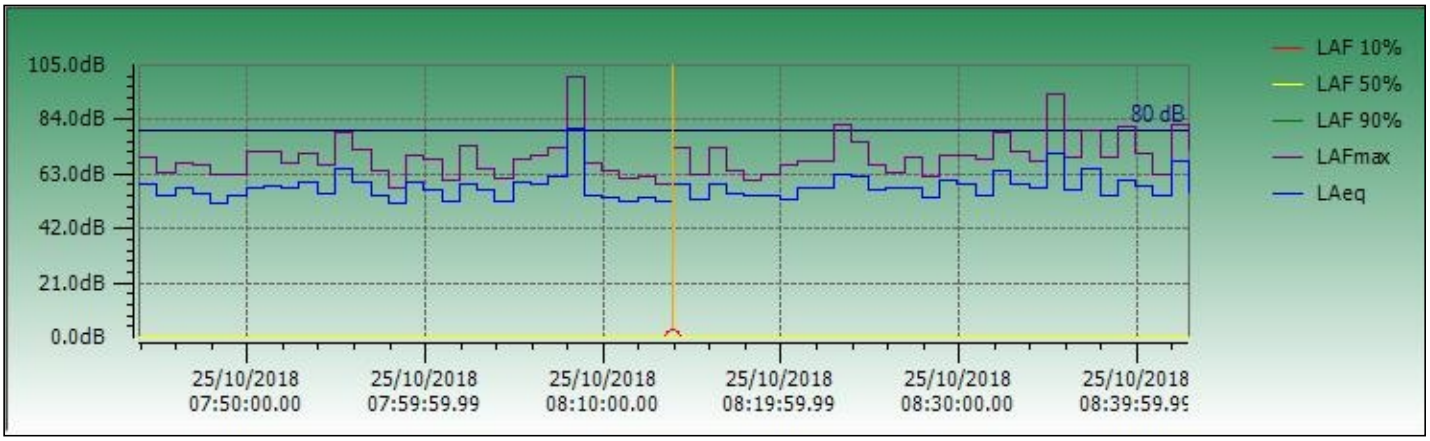
Meter #: 12744886 Calibrator #: 20453074

Traffic Counts:

	Am	Mid-day	Evening
Cars	26	16	14
SUV	35	23	33
Truck	2	3	2
Bus	1	1	1
Truck	8	7	8

Instrument Model	**CEL-633C**

Serial Number	1274486	LAeq	64.8 dB
Start Date & Time	10/25/2018 7:43:55 AM	LAFmax	100.5 dB
LAF 10%	61 dB	LAFmin	43.2 dB
LAF 50%	53.5 dB	End Date & Time	10/25/2018 8:43:55 AM
LAF 90%	49.5 dB	Duration	01:00:00 HH:MM:SS



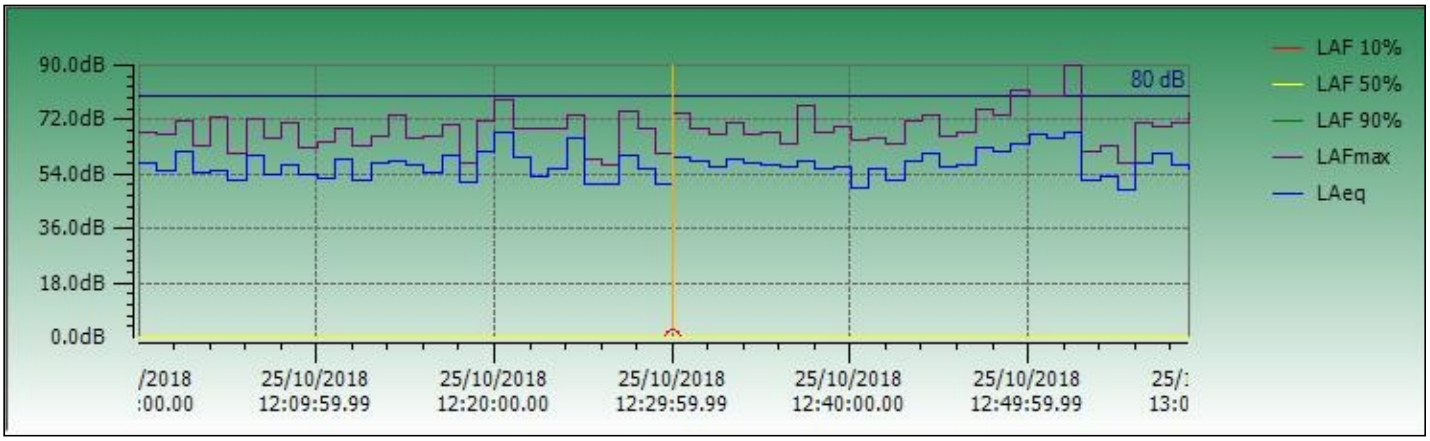
Instrument Model	**CEL-633C**

Serial Number	1274486	LAeq	57.6 dB
Start Date & Time	10/25/2018 4:30:05 PM	LAFmax	83.1 dB
LAF 10%	59.5 dB	LAFmin	41.8 dB
LAF 50%	51.5 dB	End Date & Time	10/25/2018 5:31:05 PM
LAF 90%	47 dB	Duration	01:01:00 HH:MM:SS

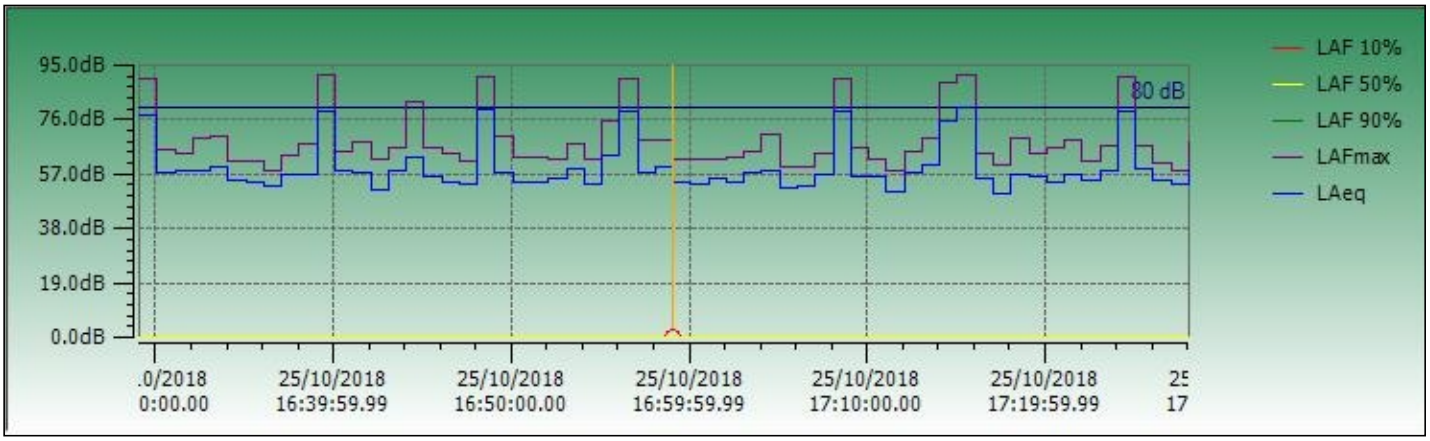


Instrument Model	**CEL-633C**

Serial Number	1274486	LAeq	59.8 dB
Start Date & Time	10/25/2018 12:00:02 PM	LAFmax	89.9 dB
LAF 10%	62.5 dB	LAFmin	40 dB
LAF 50%	52.5 dB	End Date & Time	10/25/2018 1:00:02 PM
LAF 90%	47 dB	Duration	01:00:00 HH:MM:SS

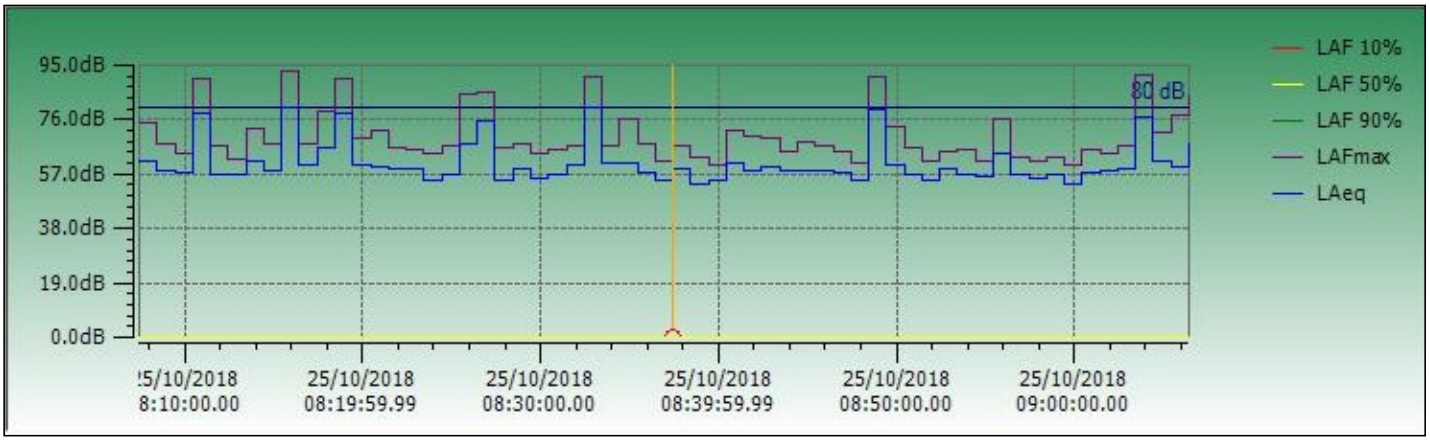


Instrument Model	**CEL-633C**
Serial Number	4278006
Start Date & Time	10/25/2018 4:29:05 PM
LAF 10%	62.5 dB
LAF 50%	54 dB
LAF 90%	49.5 dB
LAeq	70.2 dB
LAFmax	91.8 dB
LAFmin	44.2 dB
End Date & Time	10/25/2018 5:29:05 PM
Duration	01:00:00 HH:MM:SS



Instrument Model	**CEL-633C**

Serial Number	4278006	LAeq	69.8 dB
Start Date & Time	10/25/2018 8:07:26 AM	LAFmax	93.2 dB
LAF 10%	63.5 dB	LAFmin	46 dB
LAF 50%	56.5 dB	End Date & Time	10/25/2018 9:07:26 AM
LAF 90%	51 dB	Duration	01:00:00 HH:MM:SS

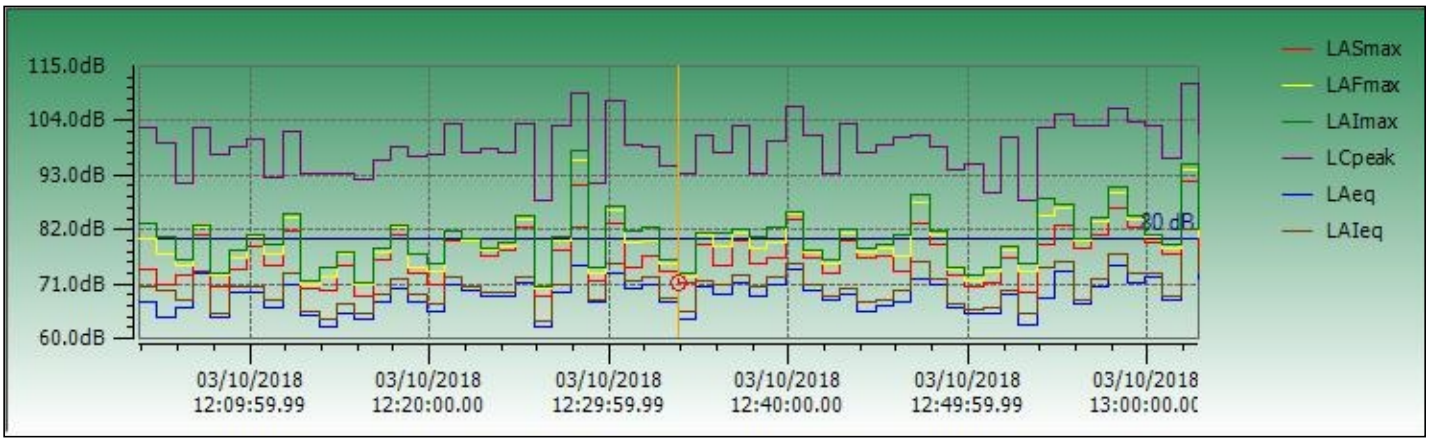


Instrument Model	**CEL-633C**

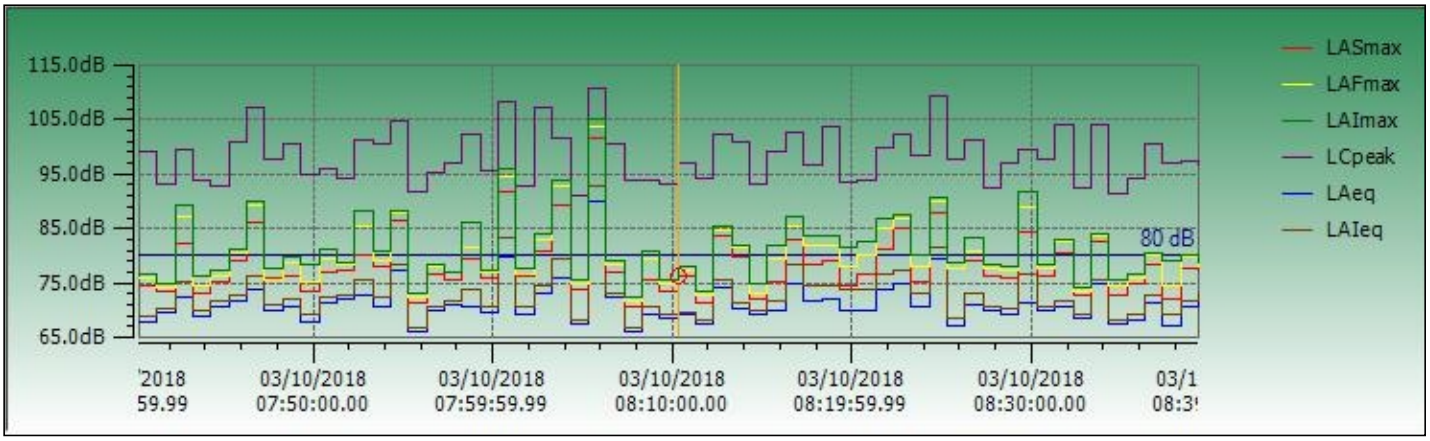
Serial Number	4278006	LAeq	69.2 dB
Start Date & Time	10/25/2018 12:08:45 PM	LAFmax	91.8 dB
LAF 10%	62 dB	LAFmin	42.3 dB
LAF 50%	53.5 dB	End Date & Time	10/25/2018 1:08:45 PM
LAF 90%	47.5 dB	Duration	01:00:00 HH:MM:SS



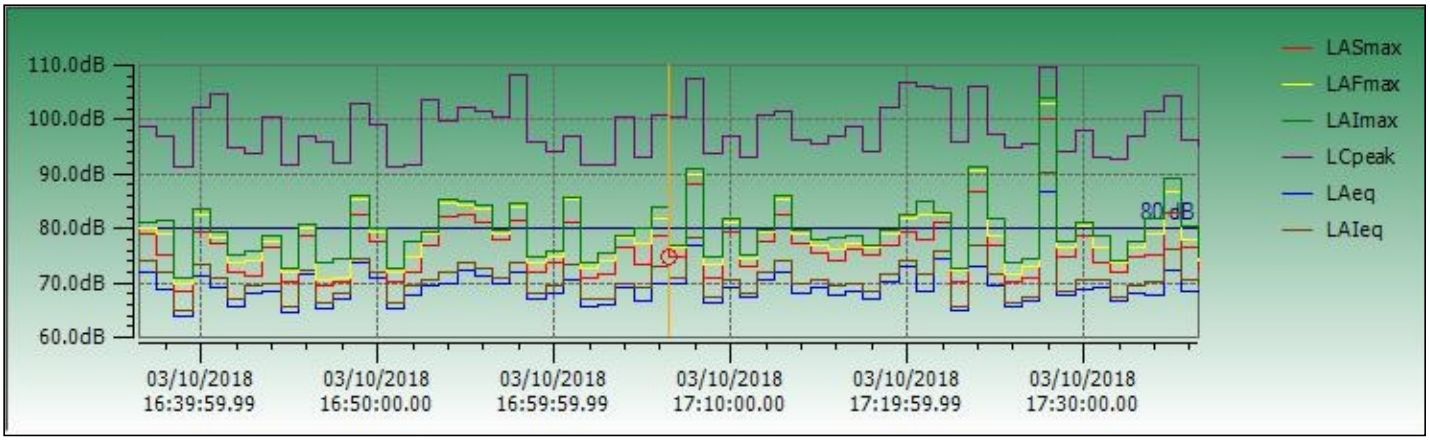
Instrument Model	CEL-633C		
LAImin with Time	52.9 dB (10/3/2018 12:26:41 PM)	LAFmin with Time	51.6 dB (10/3/2018 12:26:41 PM)
LDN	0	LAImin	52.9 dB
LDEN	0	LAImax with Time	97.9 dB (10/3/2018 12:27:51 PM)
CNEL	0	LAImax	97.9 dB
LCF 10%	82.5 dB	Calibration (After) Date	10/3/2018 4:34:39 PM
LCF 50%	75.5 dB	Calibration (Before) Date	10/3/2018 12:02:34 PM
LCF 90%	71 dB	Calibration (Before) Offset	1.7
LCF 95%	70 dB	Calibration (Before) SPL	114 dB
LCF variable%	68.5 dB	Calibration Drift	0.0 dB
LCpeak	111.6 dB	LAeq	70.3 dB
LCpeak with Time	111.6 dB (10/3/2018 1:02:30 PM)	Battery Low	Yes
LAE	105.9 dB	LAF variable%	55.5 dB
LAIeq	72.5 dB	LAF 95%	57.5 dB
LCeq	80.8 dB	LAF 90%	59 dB
LCeq-LAeq	10.5 dB	LAF 50%	66 dB
Lepd(Projected)	70.3 dB	LAF 10%	72.5 dB
Lex8h(Projected)	70.3 dB	Duration	01:00:00 HH:MM:SS
LZeq	82 dB	End Date & Time	10/3/2018 1:03:50 PM
Lepd	61.3 dB	Run Number	104
Lex8h	61.3 dB	Serial Number	4278006
Overload	No	Start Date & Time	10/3/2018 12:03:50 PM
Pause Duration	00:00:00 HH:MM:SS	Site	Unallocated
Response	Random	Location	Unallocated
Result	Cumulative	Person	Unallocated
LAFmax	96.1 dB	Process	Unallocated
LAFmax with Time	96.1 dB (10/3/2018 12:27:52 PM)		
LAFmin	51.6 dB		
Notes			



Instrument Model	CEL-633C		
LAImin with Time	55.6 dB (10/3/2018 8:04:42 AM)	LAFmin with Time	55.1 dB (10/3/2018 8:04:46 AM)
LDN	0	LAImin	55.6 dB
LDEN	0	LAImax with Time	105.3 dB (10/3/2018 8:05:38 AM)
CNEL	0	LAImax	105.3 dB
LCF 10%	83.5 dB	Calibration (After) Date	10/3/2018 12:02:34 PM
LCF 50%	76.5 dB	Calibration (Before) Date	10/3/2018 7:26:26 AM
LCF 90%	73 dB	Calibration (Before) Offset	1.7
LCF 95%	72 dB	Calibration (Before) SPL	114 dB
LCF variable%	69.5 dB	Calibration Drift	0.0 dB
LCpeak	110.7 dB	LAeq	75.1 dB
LCpeak with Time	110.7 dB (10/3/2018 8:05:38 AM)	Battery Low	Yes
LAE	110.6 dB	LAF variable%	58.5 dB
LAIeq	77.7 dB	LAF 95%	61 dB
LCeq	81.3 dB	LAF 90%	62.5 dB
LCeq-LAeq	6.2 dB	LAF 50%	69 dB
Lepd(Projected)	75.1 dB	LAF 10%	74.5 dB
Lex8h(Projected)	75.1 dB	Duration	01:00:00 HH:MM:SS
LZeq	82 dB	End Date & Time	10/3/2018 8:40:19 AM
Lepd	66.1 dB	Run Number	102
Lex8h	66.1 dB	Serial Number	4278006
Overload	No	Start Date & Time	10/3/2018 7:40:19 AM
Pause Duration	00:00:00 HH:MM:SS	Site	Unallocated
Response	Random	Location	Unallocated
Result	Cumulative	Person	Unallocated
LAFmax	103.7 dB	Process	Unallocated
LAFmax with Time	103.7 dB (10/3/2018 8:05:38 AM)		
LAFmin	55.1 dB		
Notes			



Instrument Model	CEL-633C		
LAImin with Time	55.6 dB (10/3/2018 4:39:23 PM)	LAFmin with Time	55.1 dB (10/3/2018 4:39:18 PM)
LDN	0	LAImin	55.6 dB
LDEN	0	LAImax with Time	104.1 dB (10/3/2018 5:28:13 PM)
CNEL	0	LAImax	104.1 dB
LCF 10%	84 dB	Calibration (After) Date	10/3/2018 5:40:13 PM
LCF 50%	77 dB	Calibration (Before) Date	10/3/2018 4:34:39 PM
LCF 90%	73 dB	Calibration (Before) Offset	1.7
LCF 95%	72 dB	Calibration (Before) SPL	114 dB
LCF variable%	70 dB	Calibration Drift	0.0 dB
LCpeak	109.5 dB	LAeq	72.3 dB
LCpeak with Time	109.5 dB (10/3/2018 5:28:13 PM)	Battery Low	No
LAE	107.9 dB	LAF variable%	57 dB
LAIeq	75.1 dB	LAF 95%	58.5 dB
LCeq	81.4 dB	LAF 90%	60 dB
LCeq-LAeq	9.1 dB	LAF 50%	66.5 dB
Lepd(Projected)	72.3 dB	LAF 10%	73 dB
Lex8h(Projected)	72.3 dB	Duration	01:00:09 HH:MM:SS
LZeq	82.6 dB	End Date & Time	10/3/2018 5:36:39 PM
Lepd	63.3 dB	Run Number	106
Lex8h	63.3 dB	Serial Number	4278006
Overload	No	Start Date & Time	10/3/2018 4:36:30 PM
Pause Duration	00:00:00 HH:MM:SS	Site	Unallocated
Response	Random	Location	Unallocated
Result	Cumulative	Person	Unallocated
LAFmax	102.9 dB	Process	Unallocated
LAFmax with Time	102.9 dB (10/3/2018 5:28:13 PM)		
LAFmin	55.1 dB		
Notes			



CASELLA

Certificate of Conformity and Calibration

Instrument Model:-	**CEL-633C**	**Preamplifier Type:-**	**CEL-495**
Serial Number	1274486	Serial Number	2551
Firmware revision	V006-01		
Microphone Type:-	**CEL-251**	As Received:-	117.0
Serial Number	1811	As Adjusted:-	114.0
Instrument Class/Type:-	1		



Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	22.5 °C	Test Engineer:-	Ken Umbeer
	68 %RH	Date of Issue:-	August 29, 2017
	1021.3 mBar	Date Due:-	August 29, 2018

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to NIST. This product is certified as being compliant to the requirements of the CE Directive.

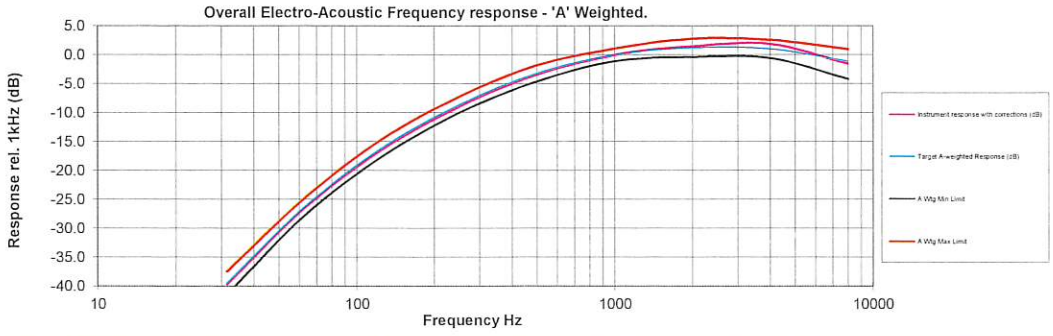
Test Summary:-

Self Generated Noise Test	**All Tests Pass**
Electrical Signal Test Of Frequency Weightings	**All Tests Pass**
Frequency & Time Weightings At 1 kHz	**All Tests Pass**
Level Linearity On The Reference Level Range	**All Tests Pass**
Toneburst Response Test	**All Tests Pass**
C-peak Sound Levels	**All Tests Pass**
Overload Indication	**All Tests Pass**
Acoustic Tests	**All Tests Pass**

Combined Electro-Acoustic Frequency Response - *A Weighted*

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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